# The Vocational Guidance Quarterly

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**WINTER 1959-1960**

# *The* **Vocational Guidance** *Quarterly*


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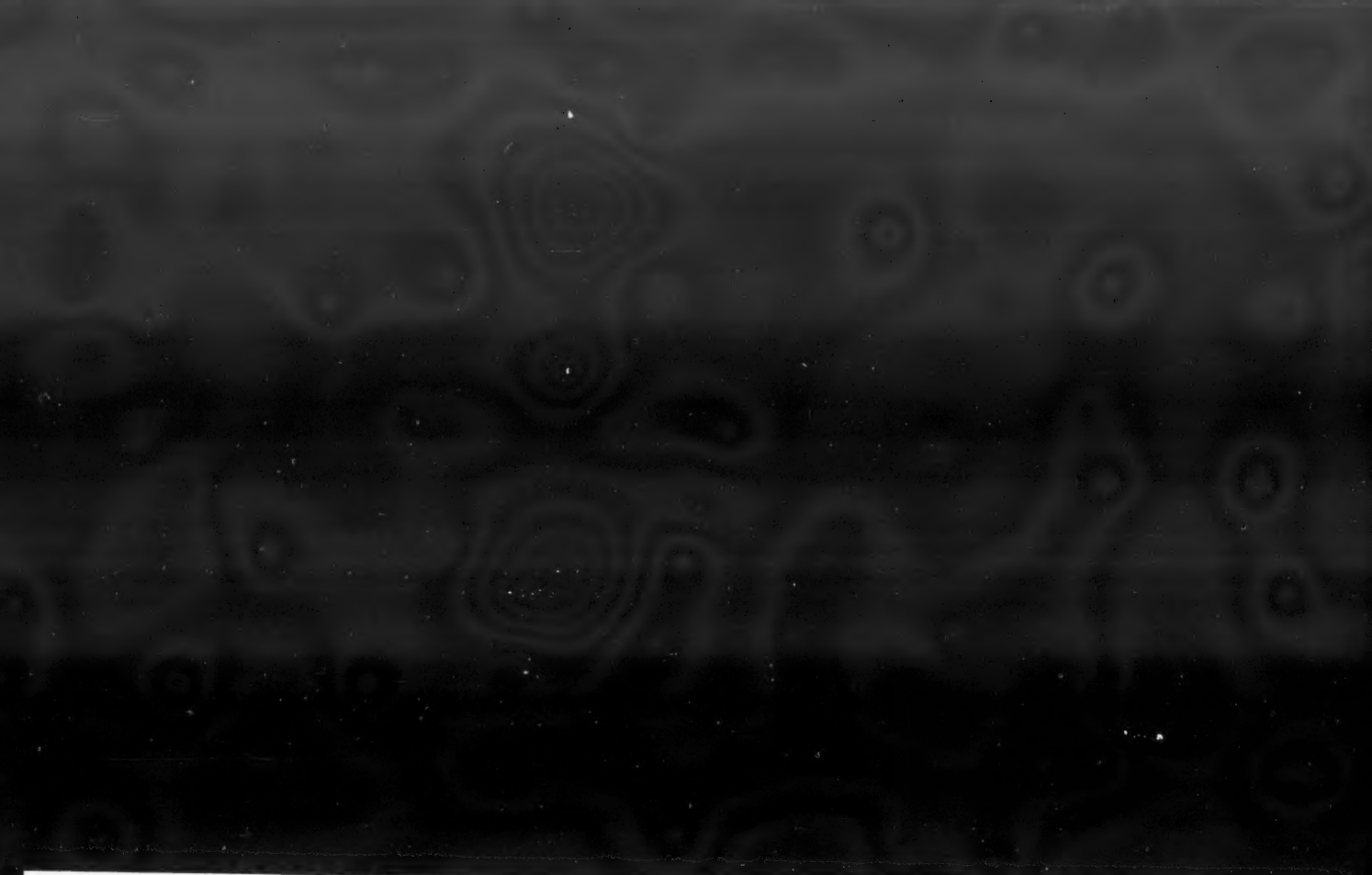


## *Message from the* PRESIDENT

NVGA noted with sorrow the death of Dr. Harry D. Kitson on September 25, 1959. In addition to his yeoman service to our association as president and long-time editor of Occupations, Dr. Kitson was a respected colleague and a friend. It was fitting that he received the NVGA Distinguished Service Award in 1958.

These awards are described on page 8 of the Autumn, 1958, Quarterly. They are an annual award and if your branch has not submitted nominations this year, you should prepare now to make such nominations next year.

The state representatives are currently helping NVGA publicize A Bibliography of Current Occupational Literature; stimulating branch nominations for annual NVGA individual and branch achievement awards; assisting with the survey of professional membership; helping members and branches make plans for attending the Philadelphia Convention; and cooperating with local drives for new NVGA members. Several state representatives whose names were not included in the original group are listed below:

Alabama: George W. Franklin
Arizona: Paul J. Danielson
Delaware: Mrs. Madeline C. Burton
Kentucky: William M. Wesley
New Mexico: Stanley W. Caplan
Tennessee: Nathan E. Acree
Virginia: John R. Anderson
Wisconsin: Emily Chervenik
Canada: Elmer E. Huff

The new Bibliography is available from Washington Headquarters for one dollar. Counselors should find it a good source of newer occupational materials. The How To Visit Colleges booklet is being revised by one of the New York State Branches and the How To Create A Career booklet by Del Byrn. They may be ready for distribution at the convention.

The Board of Trustees was dissatisfied with the expenditure of $3,000 taken from professional

member dues every other year to publish a separate directory of such members, now that APGA regularly publishes such a listing biennially. Consequently a survey of professional members is underway to see if there are more satisfactory ways of using dues from professional members. If you as a professional member have not returned your questionnaire, please do so.

Art Glenn and Lois Bream have collaborated with the former sections (informal interest groups) and other APGA divisions to provide an interesting convention program at Philadelphia. Your NVGA officers hope to see you there.

Sincerely,

Bill Cottle

Bill Cottle

## *Meet President*

## WILLIAM C. COTTLE

BILL COTTLE, president of NVGA, is Professor of Education and Assistant Director of the Guidance Bureau at the University of Kansas.

His duties involve counseling with college and high school clients at the Guidance Bureau, teaching graduate courses in guidance and counseling psychology, and research. At present the research centers around the development of a school interest inventory which will identify potential dropouts and potential high school curricular choices of a linguistic-nonlinguistic nature.

He has just completed with Dr. N. M. Downie a manuscript called "Procedures and Preparation for Counseling" which will be published early in 1960.

Dr. Cottle is also a member of the Executive Committee of the Division of Counseling Psychology of the American Psychological Association and President-elect of the American Catholic Psychological Association.

An earlier biographical sketch of Dr. Cottle appeared in the Autumn, 1955 *Vocational Guidance Quarterly* at which time he was serving as NVGA Trustee and Coordinator of Branches.

# Electronic Brains

*by* **CHARLES E. SCHOLL**

THE increasing use of electronic computers for business and scientific purposes is a development of the last decade. Before this the few computers which existed were used primarily for experimental purposes. Since 1950, however, the growth of interest in electronic computers has been marked. Professional journals and meetings of scientific societies have discussed the use and future of this new equipment; articles in popular media have proclaimed the accomplishments and potential of the "electronic brains."

CHARLES E. SCHOLL is Manager of Personnel Administration, Burroughs Corporation, in Detroit.

Many claims have been made for the computer. It has been stated that these devices will handle data processing for large businesses at greatly reduced cost; that they can read print, make computations, prepare statements and payroll checks, and so on. Peripheral equipment has been developed to increase the speed of feeding information into the computers and simplify instructions so that a man with a problem to solve will be

**The Burroughs Magnetic Character Sorter, the world's fastest, sorts bank checks in excess of 1,500 per minute, or at the rate of 400 inches per second. The Sorter is one unit of a completely automated banking system which operates on the Magnetic Ink Character Recognition principle, which has been adopted as a common language by the American Bankers Association and soon will affect virtually every bank account user.**

**Headquarters for Burroughs Corporation's Research Center are in the Central Laboratory, Paoli, Pennsylvania, pictured here. Other laboratories are located in nearby Great Valley and Howellville, near picturesque Valley Forge. At the Research Center, more than 2,000 scientists, engineers, and technicians are engaged in doing research and development work in chemistry, physics, metallurgy, electronics, and magnetics. They have been responsible for the development of data processing systems for military programs such as the Air Force Atlas intercontinental ballistic missile and for new electronic products in the Burroughs automation program for banking institutions.**

able to order the computer to get at it in a language much like ordinary English.

For instance, few industries have more need for computing equipment than banking. In just the last ten years, the banks' flow of paperwork has increased astronomically. According to the American Bankers' Association, in 1958 banks handled nine billion checks; within two years, it is believed the flood will rise to a staggering fourteen billion checks annually. To process this load of paper, document sorters handling upward of fifteen hundred checks a minute have been developed which tie in with a full range of computers to complete the data processing cycle.

### Classifications of Systems

Electronic computing systems can be classified into two general types: general-purpose and special-purpose machines.

General-purpose computers are electronic machines that do all types of arithmetic computations, *i.e.*, add, subtract, multiply, divide,

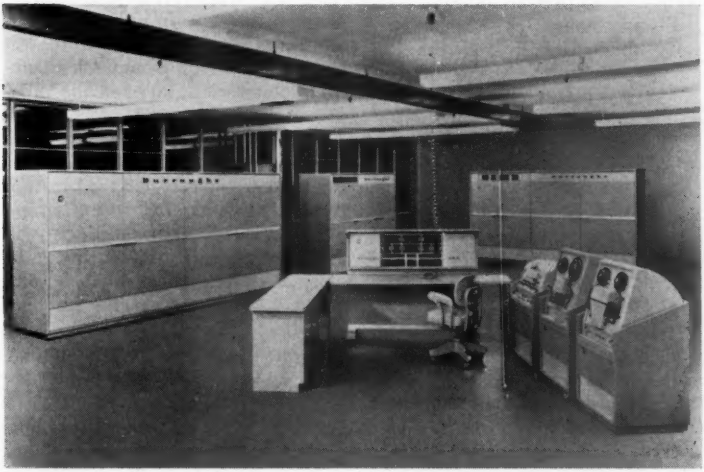
and so on. In addition, general-purpose computers are capable of performing a large number of other operations. Among other things, they can store data, compare items, and prepare reports.

Special-purpose electronic computers are limited either as to the type of computations they can make or as to the functions they can perform. For example, a special-purpose computer can be devised which only adds and subtracts. In other words, the special-purpose computer is designed to handle separate aspects of data processing.

As a result of the publicity given to the electronic computer, many people believe that computers actually are "electronic brains." Electronic computers are wonderful machines, but they cannot replace the judgment of the human being. A computer can do only what it is ordered to do. It can carry out a number of instructions rapidly and automatically; but, if a single one of the necessary instructions is omitted because it was not originally prepared by man, the machine must be ordered to stop or its results will be useless or misleading.

### Misconceptions About Computers

The speed at which electronic systems operate is another point which is commonly misunderstood. Certain aspects of their operational speeds are phenomenal. Some computers can perform thousands of electronic operations a second, but in some systems the original recording of the data is done no more rapidly than it is done at present. For example, most payroll applications of electronics still use time cards from which the data are



**The Burroughs 220 electronic digital data processing system is a development and a product of the Corporation's ElectroData Division, Pasadena, California. The Division's 1,600 employees produce these medium-priced computing systems and peripheral equipment for applications in science, industry, and commerce.**

transferred to other media for entry to the computer. The day will come when instrumentation will be developed which will automatically record all sorts of information and transfer it directly to the computer, but this is still in the future.

Preparation of "programs" or instructions for a data processing routine on an electronic computer takes more time than is sometimes believed. Weeks and sometimes months are spent in the development of the most efficient program. Each step in the instructions must be studied by expert workers. However, once the program is established, it can be stored so that it can be used over and over with a minimum of further study [2, p. 10].

### Accuracy and Dependability

As with any business machine, users are concerned with the accuracy and dependability of the electronic computer. Because of early difficulties in the developmental stage of the electronic computers, it is often believed that computers are not too dependable.

Machines use several thousand tubes and circuits, and though the percentage of failure is low, instances of failure may be fairly frequent. However, the engineers are fully aware of this problem and have incorporated a number of solutions into the computers.

Test equipment often is made part of the computer itself. Tubes usually weaken before they fail, and this weakening can be detected. Offending circuits can be removed and replaced in a matter of minutes. Stores of spare parts may be maintained with the computer. Preventive maintenance at regular intervals minimizes unscheduled down time.

Many individuals who use electronic computers are worried lest their records be lost in an electronic system. Some types of records may be lost if there is a power failure. If the data are in these types of storage devices, the sources of information should be recorded elsewhere. Then the information can always be reproduced.

Data on magnetic tapes and drums do not disappear if the power fails. However, since the data are in the form of magnetic charges, they may be erased from tapes or drums inadvertently. To protect against such loss, a complete reproduction of all information in the system can be run off periodically and transferred to safe storage. Running off the duplication is not complicated, time-consuming, or overly expensive.

Considerable effort has been made to achieve the accuracy required for accounting and auditing standards. A number of tests or checks have been devised to test the operation of commercial computers at various steps in the process of data processing. As a result, in some ways electronic computing systems already are more accurate than other types of data processing systems. Of course, if the wrong information is introduced, it will be received and utilized, but even here automatic checks may be employed. For example, the machine can be instructed to refuse to accept non-existent code numbers that a human being may try to introduce [2, p. 16].

### Preparation for Installation

In preparing for the installation of an electronic computer, there is more to be considered than the cost of the machine and the systems to be used. Personnel with new

types of ability must be hired or trained.

The computer must be "told" what it is to do in a language that it can understand. The people who deal directly with the machine must be trained in machine language. Since most machines have been working on mathematical problems, the only groups who have had a great deal of experience with computers have been electronics engineers and mathematicians.

Recent experience has shown, however, that for data processing it is practical to train personnel other than engineers and mathematicians in computer abilities and requirements. This has been accomplished by sending personnel to schools operated by manufacturers of computers and to the increasing number of universities offering computer courses.

Mathematical training is useful in formulating and stating the problems to be solved. The program of instructions for the computer must be logically complete, as must a mathematical solution. Therefore, there has been an increasing demand for personnel trained not only in mathematics but also in logic, engineering, physics, and business systems [2, p. 12].

### Some Present Concerns

At the Western Joint Computer Conference held last year in San Francisco, there was a notable increase over previous years in emphasis on academic education in computers. The Joint Computer Committee on Science and Education sponsored a special session on "Industry's Role in Supporting High School Science Problems" to get school people to express what is needed in the way of material and personnel for a program to teach computer courses; engineers to tell what they can do along these lines; and high school students to show what they will do if they have the chance.

Louis Fein, consultant, gave a paper discussing the role of the university in computers, data processing, and related fields. He suggested that universities establish a graduate school of "Computer Sciences." Mr. Fein maintained that computer sciences should be considered a discipline in much the same way that mathematics and physics are regarded as disciplines [3, p. 36].

### The Future of Computers

Designers of electronic computers are working feverishly on developing the ultimate "thinking machine" which will duplicate the complex operations of the human brain. For instance, computers which translate languages are in the developmental stage. Parallel computers are being developed which will take over the tedious and expensive step of "programming." Whereas weeks are now required to prepare a program, in the future it will be only a matter of hours. Some scientists are seeking to duplicate the brain's mechanism in hardware. However, it is doubtful whether the ultimate machine will emerge to take the place of the human being [1, p. 132].

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# VOCATIONAL REHABILITATION *of the Severely Disabled*

*by* ELSA H. WILLIAMS AND LOUIS J. CANTONI

DURING the period from March, 1955, through June, 1956, the Michigan Division of Vocational Rehabilitation and the Rehabilitation Institute of Metropolitan Detroit provided a special program of rehabilitative services to 116 severely disabled clients. Most of the funds to underwrite the program came from two federal projects, one under Section 3 and the other under Section 4a2 of Public Law 565, the Vocational Rehabilitation Act of 1954.

A major provision of the special program was the location, from March, 1955, through June, 1956, of a full-time D.V.R. counselor at R.I.M.D. During these years R.I.M.D. was housed in a pavilion of Herman Kiefer Hospital in Detroit. Thus the vocational rehabilitation counselor was in a position to coordinate medical rehabilitative services with prevocational and vocational services available at various schools in the Detroit metropolitan community and at such agencies as The Detroit League for the Handicapped, Jewish Vocational Service, and Goodwill Industries.

A report on the two federal projects was submitted in July, 1956, both to the State Supervisor of D.V.R. and to the Director of R.I.M.D. The present report represents a follow-up through February, 1958, of the 116 clients originally picked up for project services between March, 1955, and June, 1956.

ELSA H. WILLIAMS is Field Agent, North Wayne County Office, Division of Vocational Rehabilitation, Detroit; and LOUIS J. CANTONI is Associate Professor at Wayne State University in Detroit.

### Client Population

Eighty-four of the 116 clients were men and 32 were women. Their ages ranged from 17 to 70, with the average age 38. Of the 116, the majority had two or more extremities disabled from traumatic spinal cord injuries or from cerebro-vascular accidents. Others were disabled as the result of limb amputations, poliomyelitis, tuberculosis, diabetes mellitus, arthritis, Buerger's disease, cerebral palsy, and multiple sclerosis. Also represented in this group of clients were speech problems, hearing losses, visual handicaps, emotional disorders, and mental retardation.

Upon being evaluated in the course of the special program, 18 of the 116 clients were considered to have no employment potential and were therefore denied services. Of the 18, seven were hemiplegics because of cerebrovascular accidents; two had multiple sclerosis with all four limbs incoordinated and limited in function; two were quadriplegics from traumatic spinal cord injury; and two had four extremities disabled by poliomyelitis and other complications.

Another of the 18 was disabled by arthritis; still another had cerebral palsy with four incoordinated

extremities; one was an above knee amputee who moved so frequently that contact was broken; another was an arteriosclerotic bilateral below knee amputee; yet another was hemiplegic from a gunshot wound inflicted during a suicide attempt.

Practically all of the 18 had either low intelligence or emotional problems, or both. In fact, it was not the severity of physical disability alone that determined that these people had no vocational rehabilitation potential. It was, usually, the combination of low physical and mental capacity for employment.

Four of those who had been accepted for service died before completing the program. Four others accepted for service became unavailable because of conflicts with the law. Thus the number of clients who actually received vocational rehabilitation services under the provisions of the special programs was 90.

### Rehabilitation Results

As determined in the follow-up through February, 1958, 61 of the 90 clients accepted for service have been "vocationally rehabilitated," meaning that they have jobs or have in some other way attained economic independence. Thus 49 clients were remuneratively employed. Three men were rehabilitated to self care, freeing their wives to become wage earners and keep their families off relief rolls. Five housewives were functionally improved. And four students returned to school.

Following are listed the kinds of work in which the 49 remuneratively employed clients were engaged. (Job classifications approximate those of the *Dictionary of Occupational Titles.*) Five were employed in professional or managerial occupations; 12 were in clerical or sales; 12 on maintenance, personal service, or domestic jobs; 4 in skilled and 11 in semiskilled jobs; 4 in packaging or processing work of an unskilled nature; and 1 was in an unskilled job not elsewhere classified.

### Findings in Perspective

Of the 90 clients accepted for service, then, 61 were rehabilitated vocationally and 29 were not. If the 90 clients were selected because, despite severe physical disabilities, they had vocational potential, why did a third of them not find placement in some form of employment?

First of all, it must be pointed out that the 29 were comparable with the larger group of 61 in extent of physical disability. The sad truth of the matter is that these 29, like the 18 screened out of the program at the beginning, could not overcome the obstacles imposed by their own personality maladjustments. Beyond this, with a few of the 29, as was also true with some of the 18 originally denied service, there was a problem of limited intelligence.

Probably the most important single thought that comes out of this study is that vocational counseling with the severely physically disabled cannot have its full effect unless clients have the benefit of personal counseling as well. The staff limitations that existed during the period of this study are in the process of being remedied. In R.I.M.D's new facility adjoining Harper Hospital in Detroit, the work that one vocational rehabilitation counselor did in 1955–1956 will soon be done by three.

One of the three counselors will do psychological testing to deter-

mine the clients' emotional adjustments, intelligence levels, academic and other achievements, interests, and aptitudes. A second counselor will conduct a prevocational testing unit in which clients' vocational potentials can be found out through practical tryouts in a simulated work situation. The third counselor will have extensive knowledge of community resources and will serve primarily as a referral and placement specialist.

But the point is that each of these three counselors should be first personal counselors and then specialists, one in psychological testing, another in prevocational tryout, and the third in referral and placement. For it is how a client feels about what he is doing, or hopes to do, that determines the success or failure of his own efforts and the efforts of others in his behalf. If a client is to overcome the emotional difficulties that stand in the way of his vocational adjustment, he needs the help of counselors who are qualified to work not only with his vocational problems but also with his personal problems.

## *Science Futures for Girls*

**Science Futures for Girls,** eight-page leaflet, and **Careers for Women in the Physical Sciences,** 77-page Women's Bureau Bulletin 270, have been released in January by the U. S. Department of Labor.

Copies may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 5¢ and 35¢ respectively.

The bulletins are designed to encourage capable young women to train for science.

# VOCATIONAL GUIDANCE and Familial Influences

*by* **ANTHONY C. RICCIO AND HERMAN J. PETERS**

WHAT ARE THE ATTITUDES toward teaching of the offspring of teachers? A supervisor of student teachers remarked to the writers that teacher education students who were the children of teachers established better teacher-pupil relations than did other teacher education students.

If this informal observation is valid, then more attention should be directed to recruiting into teacher education programs the children of teachers. Accordingly, it is the purpose of this paper to determine whether there are significant differences between the

ANTHONY C. RICCIO is Assistant Professor, University of Notre Dame and HERMAN J. PETERS is Professor of Education at The Ohio State University in Columbus.

TABLE 1

Comparison of Mean MTAI Scores of Study Group Members in Terms of Teaching and Non-Teaching Parents

| Category | N | Mean | S.D. | t |
|---|---|---|---|---|
| Teaching parents | 56 | 17.13 | 31.64 | 0.22 |
| Non-teaching parents | 432 | 16.50 | 28.72 | |

attitudes toward teaching of teacher education students whose parents are teachers and other teacher education students.

Personal data sheets and *Minnesota Teacher Attitude Inventory* scores were available for 488 students who were enrolled in the first course in education at The Ohio State University in the autumn quarter of the 1958–1959 academic year. Approximately 80 per cent of these students were freshmen, and there were three times as many females as males in the study group.

An analysis of the personal data sheets revealed that 56 of the study group members, 44 females and 12 males, were the children of teachers. It was therefore possible to compare the performance of these students with all other students on the MTAI, an instrument which predicts the kind of classroom atmosphere a teacher will maintain as well as intelligence tests predict college grades.

The following null hypothesis was formulated and tested: There is no significant difference between the mean MTAI scores of teacher education students whose parents are engaged in teaching and those students whose parents are non-teachers. The 0.05 level of confidence was selected as the criterion for significance.

Table 1 shows that there is a slight difference in favor of the children of teachers between the mean MTAI scores of the groups compared, but this difference is not significant. The null hypothesis cannot be rejected.

It is, nonetheless, interesting to speculate as to the nature of the teacher who encourages his progeny to teach. One wonders what reasons are advanced by these teachers to their children. Are the reasons offered altruistic or materialistic? And, in either event, how do these exhortations of parents influence the teacher education student's attitudes toward teaching?

One may also ask whether the children of teachers enter teaching because they are convinced that it is a desirable profession or because it is one of the few professions about which they know anything. Again, is there a certain amount of security in choosing the profession of one's parent? Could vocational guidance in the junior high school and high school have broadened the occupational horizon of a student and helped him to choose an occupation, teaching perhaps, that he consciously believed would help him to lead the kind of life he wants to live?

These and similar questions could well be the focus of longitudinal research on familial influence and occupational choice.

# Rejection of Vocational Interest Areas

## By High School Students

*by* WILFRED L. SHOEMAKER

OUR PROFESSIONAL LITERATURE reveals numerous studies attempting to determine the stability, or lack of stability, of vocational interests. However, the literature is relatively barren of investigations attempting to determine whether some vocational interest areas hold great appeal, or little appeal for adolescents.

Strong [2] states that interests reflect the environment and in turn are evaluated by the environment. If this be true, it would be logical to assume that as technological advances are made, environmental conditions will undergo changes that will in turn affect the vocational interests of high school students. Types of activities and vocations that once appealed to and were accepted by, high school students may no longer hold the same status.

It has often been assumed that adolescents, as a group, tend to react in certain behavioral patterns toward various vocational activities. However, there appears to be a paucity of data to substantiate these assumptions. If adolescents do reject certain vocational interest areas, and patterns of rejection measured by the Kuder Preference Record—Vocational can be shown, similarity of mean scores on the various scales from grade level to grade level throughout high school may be indicating a stability of measured interests that does not really exist. Also, patterns of rejection may reveal that we are in error in using norms that combine grade levels.

### Two Thousand Tested

The major purpose of this investigation was to study the extent to which vocational interests as measured by the Kuder Preference Record—Vocational are rejected by high school students on various grade levels. In order to make a thorough study of rejection the extent to which measured vocational interest areas are accepted was studied also.

The data for this study were secured by administering the Kuder Preference Record—Vocational Form CM to the white student population of five Missouri high schools. A total of 2,338 students was tested and 1,928 usable results were obtained. Of the usable results 913 were for boys and 1,015 were for girls. Throughout the investigation the sexes were handled as separate groups.

A tabulation was made of all raw scores and the mean was computed in each area of the test for both

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sexes. These means were then converted to percentile ranks based on published national norms. All of the mean scores were within the limits of the 25th and 75th percentile ranks of the national norms [1] and the majority of them were near the 50th percentile rank.

### Rejection, Acceptance Studied

Throughout this investigation the term acceptance is used to refer to those interest area scores that fall above the 75th percentile rank on the national norms. The term rejection is used to refer to those interest area scores that fall below the 25th percentile rank on the national norms.

*Rejection by Total Sample:* When the percentages of students showing rejection were computed it was revealed that the total sample of boys showed rejection for three of the ten interest areas and the total sample of girls showed rejection for six of the ten interest areas. The per cents of scores in these areas of rejection were statistically significant when tested against the theoretical 25 per cent that should fall below the 25th percentile rank.

The data suggested that the Persuasive, Musical, and Social Service areas are areas of rejection for boys. This rejection was doubly shown by high percentages of rejection and low percentages of acceptance. Also, it might be assumed that there was a tendency for boys to reject the Scientific and Clerical areas since relatively small percentages of those tested accepted these areas. The fact that these areas were not accepted by the expected percentages was in itself an indication of possible rejection.

The data also suggested that the Outdoor, Mechanical, Scientific, Persuasive, Artistic, and Musical areas were areas of rejection for girls. Of the six areas, rejection was doubly shown in the Scientific, Persuasive, and Musical areas by high percentages of rejection and low percentages of acceptance.

*Acceptance by Total Sample:* No areas of acceptance was found for either boys' or girls' total sample. In both cases, the per cent of scores in any area that fell above the 75th percentile rank was not significantly greater than the theoretical 25 per cent that should appear.

### Grade Patterns Vary

*Patterns of Interest Change by Grade Level:* A breakdown of the total samples into grade levels revealed several patterns concerning possible explanations as to how areas of rejection may have developed.

A pattern of increase of rejection coupled with decrease of acceptance was shown by boys in the Outdoor, Scientific, and Artistic areas, and for girls in the Scientific, Artistic, Literary, and Musical areas. The increase of rejection was significant for boys in all three areas, but in only the Literary area for girls. The decrease of acceptance was significant in only one area for each sex; the Outdoor for boys, and the Literary for girls.

A pattern of decrease of rejection coupled with increase of acceptance was shown by boys in the Persuasive and Musical areas, and by girls in the Mechanical, Persuasive, and Social Service areas. The decrease of rejection was significant for boys in both areas and in the Persuasive and Social Service areas for girls. The increase of acceptance was significant in the Persuasive area only, for both sexes.

A pattern of increase of both rejection and acceptance was shown by boys in the Mechanical and Literary areas, and by girls in the Clerical area. The increase of rejection by boys was not significant in either area but was significant for girls in the Clerical area. The increase of acceptance was significant for boys in the Mechanical area but was not significant for girls in the Clerical area.

A pattern of increase of rejection coupled with little or no change of acceptance was shown by girls in the Outdoor, and Computational areas. The increase of rejection was significant in the Computational area. This pattern was not shown by boys in any area.

A pattern of little or no change of rejection coupled with increase of acceptance was shown by boys in the Computational area only. The increase of acceptance was not significant. This pattern was not shown by girls in any area.

A pattern of little or no change of rejection coupled with decrease of acceptance was shown by boys in the Clerical area only. The decrease of acceptance was not significant. This pattern was not shown by girls in any area.

A pattern of little or no change of both rejection and acceptance was shown by boys in the Social Service area only. This pattern was not shown by girls in any area.

### Conclusions Are Warranted

On the basis of this investigation and within its limitations, it would seem reasonable to conclude that:

1. High school students of both sexes reject certain identifiable vocational interest areas measured by the Kuder Preference Record—Vocational on various grade levels.

2. High school students of both sexes accept only a small number of the vocational interest areas measured by the Kuder Preference Record—Vocational on various grade levels.

3. High school students of both sexes show wide variations of measured vocational interests among grade levels. This suggests that norms should be provided for each high school grade level based upon representative sampling to determine further the feasibility of using present published norms for counseling purposes.

4. Areas of rejection and acceptance do not show similarity throughout the high school period. They are characteristic only of certain grade levels.

5. There are definite trends in the vocational interests of adolescents as measured by the Kuder Preference Record—Vocational throughout the high school period. Significant is the tendency of boys to reject Persuasive, Musical, Social Service, Outdoor, Scientific, and Artistic interest areas, and of girls to reject Persuasive, Mechanical, Scientific, Outdoor, Artistic, Literary, and Musical interest areas on various grade levels. Few clear-cut trends of accepted interest areas for either sex are discernible.

6. Vocational interests of high school students of both sexes as measured by the Kuder Preference Record—Vocational are not stable in the time-span studied. Consequently it is unwarranted to use the Kuder for purposes of vocational planning on grade-level nine.

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# Doctorates

## *Held by APGA Members*

*by* **JOHN P. McQUARY**

THE APGA membership list has been studied to determine both the number of APGA members who possess either the Doctor of Philosophy degree or the Doctor of Education degree and the institutions which conferred these degrees. The third edition of the APGA directory of members published in November, 1958, provides these data.

There were two main motivations for completing these tabulations. First, with the current surge of interest in professional counseling, the number of persons who consider further graduate work beyond the master's level has increased. The provisions of the National Defense Education Act have played an important role in this. Graduate students working toward professional counseling certificates often ask questions relative to further work which this study may help to answer. This is especially true in colleges which do not offer the doctorate.

Secondly, with expansion of guidance services in colleges and secondary and elementary schools, there is an increased demand for professional guidance workers who possess a doctor's degree. It was felt that these data had value to school superintendents, college presidents, deans, department heads, and others who have the problem of finding such personnel to fill job vacancies. Knowing the sources of the supply seems worthwhile.

### The Directory Picture

In observing the table below, a number of important facts should be considered. The conferring institution of a few APGA members who possess doctorates was not listed in the directory. In order to be consistent, these persons were excluded in the tabulation. A few members had the graduate school listed but not the date the degree was received. These were included in the tabulations.

It should be remembered that the field of concentration such as guidance, psychology, counseling psychology, educational psychology, and others was not indicated in the directory. Finally, these data pertain to the paid-up membership of APGA as of the date of publication of the directory. In general, this should be fairly representative of our professional group although the reader may know of persons not listed in this publication.

Those institutions conferring at least 10 doctorate degrees are shown in the following table.

JOHN P. McQUARY is Assistant Director of Student Personnel and Guidance, East Texas State College, Commerce, Texas.

DOCTORATES BY CONFERRING INSTITUTIONS

| Rank | Institution | Before 1920 | 1920–1929 | 1930–1939 | 1940–1949 | 1950–1958 | TOTAL |
|---|---|---|---|---|---|---|---|
| 1. | Columbia University | 3 | 11 | 38 | 47 | 164 | 263 |
| 2. | New York University | 1 | 4 | 9 | 21 | 69 | 104 |
| 3. | University of Minnesota | 0 | 2 | 10 | 17 | 64 | 93 |
| 4. | Stanford University | 0 | 0 | 8 | 20 | 39 | 67 |
| 5. | Ohio State University | 0 | 2 | 12 | 19 | 32 | 66* |
| 6. | University of Chicago | 2 | 4 | 9 | 9 | 31 | 55 |
| 7. | University of Wisconsin | 0 | 0 | 8 | 14 | 29 | 51 |
| 8. | University of Indiana | 0 | 0 | 1 | 2 | 45 | 49* |
| 9. | Michigan State University | 0 | 0 | 0 | 1 | 43 | 44 |
| 10. | Northwestern University | 0 | 0 | 3 | 9 | 31 | 43 |
| 11. | University of Iowa | 0 | 4 | 18 | 7 | 11 | 40 |
| 12. | University of Missouri | 0 | 0 | 3 | 7 | 29 | 39 |
| 13. | University of Michigan | 0 | 0 | 4 | 11 | 19 | 34 |
| 13. | University of Southern California | 0 | 1 | 3 | 12 | 18 | 34 |
| 15. | University of Colorado | 0 | 0 | 1 | 5 | 26 | 32 |
| 16. | Harvard University | 0 | 2 | 6 | 6 | 17 | 31 |
| 17. | Syracuse University | 0 | 0 | 3 | 6 | 18 | 28* |
| 17. | Yale University | 0 | 1 | 14 | 4 | 9 | 28 |
| 19. | Colorado State College | 0 | 0 | 0 | 3 | 23 | 26 |
| 19. | Pennsylvania State University | 0 | 0 | 0 | 4 | 22 | 26 |
| 21. | University of California | 0 | 1 | 2 | 2 | 19 | 24 |
| 22. | Boston University | 0 | 0 | 0 | 4 | 19 | 23 |
| 22. | University of Nebraska | 0 | 0 | 2 | 4 | 17 | 23 |
| 22. | University of Illinois | 0 | 2 | 3 | 2 | 16 | 23 |
| 22. | University of Pennsylvania | 0 | 1 | 3 | 6 | 13 | 23 |
| 22. | University of Kansas | 0 | 0 | 2 | 2 | 19 | 23 |
| 27. | George Washington University | 0 | 1 | 0 | 6 | 15 | 22 |
| 28. | Purdue University | 0 | 0 | 0 | 6 | 15 | 21 |
| 28. | Cornell University | 0 | 1 | 3 | 2 | 15 | 21 |
| 30. | University of Pittsburgh | 0 | 0 | 2 | 4 | 13 | 19 |
| 30. | Fordham University | 0 | 0 | 1 | 6 | 12 | 19 |
| 32. | University of Texas | 0 | 0 | 1 | 5 | 12 | 18 |
| 33. | Catholic University | 1 | 0 | 1 | 2 | 12 | 17* |
| 33. | University of Washington | 0 | 1 | 0 | 3 | 12 | 17* |
| 35. | University of Denver | 0 | 0 | 0 | 1 | 15 | 16 |
| 36. | Rutgers University | 0 | 0 | 0 | 6 | 8 | 14 |
| 36. | Temple University | 0 | 0 | 0 | 4 | 10 | 14 |
| 36. | UCLA | 0 | 0 | 0 | 3 | 11 | 14 |
| 39. | Oregon State University | 0 | 0 | 0 | 0 | 13 | 13 |
| 40. | Western Reserve University | 0 | 0 | 0 | 0 | 12 | 12 |
| 40. | University of Wyoming | 0 | 0 | 0 | 2 | 10 | 12 |
| 40. | University of Connecticut | 0 | 0 | 0 | 0 | 12 | 12 |
| 40. | Washington University (St. Louis) | 0 | 0 | 0 | 1 | 11 | 12 |
| 44. | Wayne State University | 0 | 0 | 0 | 1 | 10 | 11 |
| 44. | University of Utah | 0 | 0 | 0 | 1 | 10 | 11 |
| 46. | George Peabody University | 0 | 1 | 4 | 1 | 4 | 10 |
| | All Others | | | | | | 169 |

| | |
|---|---|
| Total no. of Doctorates | 1,766 |

* Total contains at least one person with date of degree not included in Directory.

In summary, the APGA membership directory of November 1, 1958, lists more than 9,000 names. Of these approximately 1,800 possess a doctorate degree. These degrees have been conferred by 110 different institutions.

## Publications on Honors Programs

**The Superior Student,** monthly newsletter of the Inter-University Committee on the Superior Student, and **Descriptions of Honors Programs in American Colleges and Universities,** a booklet, are available to interested persons on request.

Write Joseph W. Cohen, University Honors Information Service, University of Colorado, Boulder, Colorado.

The ICSS collects information on college programs for the academically talented. It is an organization of representatives of publicly supported colleges and universities created to encourage the development of "Honors" programs.

## Bureau of Labor Standards Bulletins

THE BUREAU OF LABOR STANDARDS announces three new publications relating to youth employment. Two of these are addressed to youth; one is addressed to those who work with young people and occasionally place young people on jobs.

**We're Never Too Young to Learn Safety,** addressed to youth, describes specific ways of saving fingers, toes, eyes, and muscles through safe working habits. Free copies are available as long as the supply lasts.

**Some Facts for Young Workers,** Bulletin No. 208, addressed to youth, gives information on what employers expect of their workers, on the laws that will affect them as workers and on their rights and their responsibilities.

**The Self-training Unit on Child Labor Laws for Youth Placement Workers,** Bulletin No. 202, will help youth workers become thoroughly familiar with the laws affecting youth placement. The laws often are not as stringent as people suppose.

Limited numbers of free copies of Bulletins 202 and 208 are available from the Bureau of Labor Standards. To purchase copies, write to the superintendent of Documents, Government Printing Office, Washington 25, D. C. Single copy price of Bulletins 202 and 208 is 15 cents.

## *Meet Secretary*

## HELEN WOOD

HELEN WOOD, NVGA Secretary, is Chief of the Branch of Occupational Outlook and Specialized Personnel of the Bureau of Labor Statistics, U. S. Department of Labor. She directs the preparation of the *Occupational Outlook Handbook* and other publications for use in vocational guidance.

Born in Philadelphia, Miss Wood is a graduate of Wellesley College and holds a Master's Degree from Columbia University. She began her working career as a social caseworker with the Family Society of Philadelphia.

Her direct concern with the employment and social problems of young people and their educational and occupational choices started a few years later, with her appointment to the staff of the Bureau of Women and Children in the Pennsylvania Department of Labor and Industry.

From there, she moved to the Children's Bureau of the U. S. Department of Labor, where she studied these same kinds of problems and worked on the development of standards to protect young people against employment in hazardous occupations and to promote suitable conditions for them.

After the Occupational Outlook Service was set up in the Bureau of Labor Statistics, Miss Wood transferred to that agency and played a part in developing the *Occupational Outlook Handbook*. She now has charge of the preparation of the Handbook, the *Occupational Outlook Quarterly* and other related publications. She is author of many reports and articles on employment and educational trends, the occupational outlook, and the employment problems of young workers.

Miss Wood has served as Chairman of NVGA's Occupational Research Section and as NVGA delegate to the APGA Assembly. A professional member of the organization, she has also done other committee work for it and has been a speaker at many sessions at national conventions and meetings of local chapters.

Another of her extracurricular interests is leadership in the program for teen-age youth of the community conducted by her church, which is aimed at reducing juvenile delinquency in that area of Washington. She also works on delinquency and other community welfare problems through the Social Welfare Department of the D. C. Federation of Churches, of which she is Secretary.

* * *

**Experience is a hard teacher. She gives the test first and the lesson afterwards.**

# VOCATIONAL GUIDANCE
## *in the Elementary School*

*by* **WALTER M. LIFTON**

THE SWELL in the number of text books written for people involved in guidance in elementary schools is but one indication of the increasing concern of professional workers with their responsibility for providing help at this level. Counselor Trainers find an increasing proportion of their classes contain students working in the elementary schools. This article is devoted specifically to a discussion of the role and use of vocational guidance in the elementary grades.

### The Growing Concern

For some time now writers in the field have pointed out the marked discrepancy between childrens' concerns and the manner in which the text books and teachers meet them. Specifically Bennett [1] in evaluating the results of the Midwest Conference of State Supervisors of Guidance Services and Counselor Trainers [2] held in 1950 as well as the results of the SRA Junior Inventory points up the real and growing concern of youngsters over their academic and vocational future. She documents clearly the fact that, based on SRA Junior Inventory responses, their answers to the question "I'd like to know what I'm going to be when I grow up" remained approximately the same from grades 4 through 8 accounting for 38, 41, 38, 36, and 40 per cent respectively of responses for each grade.

WALTER M. LIFTON is Director of Guidance Publications and Services, Science Research Associates, Chicago.

Hoppock [3], beyond suggesting ways occupational concepts could be introduced into the schools, points up the need to integrate the presentation of the material into the existing currricula of the schools. Certainly the incorporation of any data into the curriculum today is dependent on both parent and teacher attitude. With this in mind two studies are worth reviewing.

Shores and Rudman [4] [5] surveyed 270 communities to see how closely parent's, teacher's, librarian's, and children's evaluation of children's reading interests and informational needs (grades 4–8) coincided. A few of their results are cited. They found that girls more frequently than boys wanted to ask about horses, dogs, vocations, boy-girl relationships, ethics, values, and religion. Parents show a particularly strong desire for children to ask questions about vocations. Teachers are more concerned with social skills. It is also possible that teachers consider the elementary school years as inappropriate for serious concern with vocations.

They also found that children are not necessarily interested in asking about the same things that they wanted to read about.

### An Exploratory Study

The second study was conducted by the author. It was concerned with the implication that teachers might not be aware of the early age at which attitudes and

values about the world of work begin to crystallize. It was also concerned with the emphasis on vocations, in terms of career planning, rather than utilizing the elementary grades as a place where curiosity about the world might help broaden a youngster's perspective.

Two beginning classes in guidance provided subjects for the survey. The students in these classes were primarily teachers in the elementary schools and did not plan on professional guidance careers but wished instead to increase their classroom effectiveness. Each teacher was asked to consider which occupations they could use as illustrations of classroom concepts. To insure real occupational sophistication they were restricted to only those jobs in which they knew training requirements, salary levels, and job opportunities. Using the *Dictionary of Occupational Titles* categories their responses were tallied. Professions led the list by far, followed by sales and clerical tasks, with skilled trades barely showing. The job distribution was in *almost exact* reverse to the distribution of jobs resulting from census data.

The teachers were then asked to go through all of the books used in their classes and to make a list of any occupation used as an illustration. Again the results were fascinating.

In the primary grades there was a heavy emphasis on service occupations. There was then a rapid shift in the upper grades to the professions, with the skilled trades again being barely represented. In other words, from both their teachers and their texts youngsters were receiving a distorted picture of the importance and types of jobs available.

Realizing that these teachers could not help youngsters secure a true picture of the world of work if their own experiences and text books did not offer help, the author then began a survey of books available in the area of occupations to develop a list teachers could use to supplement their background. Again the results were surprising. From a series of books for the early primary grades published by Children's Press there appears to be a complete vacuum until books for junior high school youngsters like the Dodds Meade series occur. To verify this finding the author approached several major book publishers to explore their interest in books describing the world of work and designed for grades 3–6. Repeatedly the answer given was that they do not have, nor do they plan to publish books of this type because "children are not interested in vocations."

### Serious Questions Arise

All of these results raise for guidance counselors several serious questions. If these results based upon small samples hold true in more controlled studies several avenues are available to the profession to improve the situation. Guidance supervisors might encourage teachers to engage in more field trips where the emphasis of both pupils and teacher would be directed on the workers and the skills they utilize. Parents might be encouraged to come to school and share with the children information about their jobs. Teachers could be encouraged to seek different types of employment during summers. Publishers could be encouraged to put out materials which they then could be sure of selling.

The above material suggests a

rather negative picture. There are several recent advances, however, worth noting. Several of the leading encyclopedias have completed major revisions of their entries on careers and vocations. In almost all cases the number of pages allotted has been vastly increased. At least two publishers utilize a guidance consultant to insure that all articles in their encyclopedias present a more realistic picture of the world of work and job opportunities. One anthological encyclopedia [6] has introduced a vocational game which appears throughout the volumes. The game is designed to help children see how their interests persist from one industry to another. They also are given a chance to think about work activities on several hundred jobs. Recently a social studies series on the third grade level focused on "Working Together" [7] utilized skilled trades among their many examples. There is a book [8] on the world of work for use in grades 4–5 now being given a pilot run in three cities to test children's interests and the correct placing of this kind of material. One city system [9] has developed a course for use in grades 7–8 to help children who may not be continuing on to high school.

It is obvious that many questions requiring research have been raised. Equally necessary is the development of texts to meet the developing needs of schools for vocational guidance materials. If the age old concept of guidance as a life long process is to remain true, greater attention to the role of the elementary school can no longer be delayed.

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8. Lifton, Walter M., *What could I Be?* To be published by Science Research Associates.
9. Burack, Martin. Unpublished course materials for City of Chicago elementary schools course on vocations, Grades 7–8.


* * *

**Why advertise your troubles? There's no market for them.**

## Occupational Outlook Quarterly

The **Occupational Outlook Quarterly,** U. S. Department of Labor, Bureau of Labor Statistics, December 1959, carries major articles on:

What's Ahead for College Graduates
Careers in Business Management
Growing Opportunities in the Skilled Trades
Employment Outlook for Astronomers
Future Needs for Machining Workers in New York State
Earnings in Typical Office and Plant Jobs in 20 Labor Markets, 1958–59.

On sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., the Occupational Outlook Quarterly costs $1 per year (four issues), 30¢ per copy.

## Fictional Career Books

A **Selected Reference List of Fictional Career Books,** seven-page Guide Lines leaflet of the Guidance and Student Personnel Section of the U. S. Office of Education written by Royce E. Brewster, has been released recently.

The list, representing a collection of new material, contains a wide variety of books, all well written. They will be useful to counselors, librarians, and especially persons engaged in group information activities, and should also command the attention of subject matter teachers for term projects or reports, the author explains.

## What Could I Be Book

**What Could I Be** is a new book introducing the world of work to children. The 33-page book by Walter M. Lifton is intended as a foundation for later job choice, not an effort to force decisions at an early age.

It is a publication of Science Research Associates, Inc., Chicago, costing 54¢ per copy. There is an accompanying teacher's manual.

# New Books

## On Vocational Guidance

*by* **DELMONT K. BYRN**

*Occupational Outlook Handbook* (1959 Edition), U. S. Department of Labor, Bureau of Labor Statistics, BLS Bulletin 1255. Washington, D. C.: Superintendent of Documents, 1959. 800 pp. Paperbound, $4.25.

This new fourth edition of this comprehensive reference book on occupations for use in guidance presents information on 600 occupations and 30 major industries. There are new sections on technicians, programmers, school counselors, sales occupations, driving occupations, instrument repairmen, baking industry, paper industry, and the aircraft, missile, and spacecraft field. The report on each occupation describes the nature of the work, the employment outlook, training, requirements for entry positions, lines of advancement, where the jobs are located, earnings, working conditions, and where to find further information. There are 177 pictures and 56 charts.

A periodical, the *Occupational Outlook Quarterly*, available from the same source, $1 for four issues a year, provides current information on employment trends and outlook, supplementing the *Occupational Outlook Handbook*.

*The College Handbook, 1959–61*, edited by S. Donald Karl and Barbara L. Diehl. New York: College Entrance Examination Board, 1959. Available from Educational Testing Service, Princeton, N. J., or Box 27896, Los Angeles 27, California. 556 pp. Paperbound $2.

The 250 member colleges are described in this handbook for students, parents, and counselors. Each descriptive statement written by the colleges themselves summarizes terms of admission, study programs, degrees granted, expenses, and financial aids. Colleges participating in the College Scholarship Service of the Board are listed as are member colleges which grant advanced placement to qualified students.

*Directory of American Psychological Services, 1960*, by the American Board for Psychological Services. Glendale, Ohio: American Board for Psychological Services, 1959. 214 pp. Paperbound $1.50.

This is an official listing of "competent psychological services of high quality available to the public," according to evaluation by the American Board for Psychological Services, an independently incorporated board founded by the American Psychological Association in 1954. Each listing gives the name and location of the agency, sponsorship, services, clientele, fees, method of application, director, chief psychologist, hours, and branch offices. Agencies or individuals voluntarily apply for listing; non-listing cannot be taken to mean that they are not qualified.

*Ten Thousand Careers,* by Robert L. Thorndike and Elizabeth Hagen. New York: John Wiley and Son, 1959. 345 pp. $8.50.

This is a report of the Grant Foundation study of 17,000 Air Force cadets who were given a battery of tests in 1943 during World War II. It analyzes these measured aptitudes in relation to educational and vocational history obtained from 10,000 of them in 1955 and 1956. The authors studied present work, income earned, self-rating of success and satisfaction, and overall appraisal of occupational stability and progress.

*Guidance in Agricultural Education,* by Harold M. Byram. Danville, Illinois: The Interstate Printers and Publishers, 1959. 238 pp. $4.50.

Information is provided on agricultural occupations and how youth may make a beginning and advance in them. This book is intended especially for vocational agriculture teachers and school counselors who work with farm youth. It is designed as a textbook or reference in graduate or undergraduate courses in guidance and agricultural education. Included is an annotated list of 72 pamphlets and bulletins dealing with occupational information material in agriculture.

*Admission Requirements of American Medical Colleges Including Canada, 1959–60,* edited by Helen Hofer Gee and E. Shepley Nourse. Evanston, Illinois: Association of American Medical Colleges, 1959. 237 pp. Paperbound $2.

This annually revised handbook provides an official source of information on pre-medical preparation and admission to medical school. Chapter 1 deals with the medical school admission process, chapters 2 and 3 list for schools in the United States and Canada: history and description of the school, philosophy, and special programs, admission requirements, student selection, application procedure, costs and fees, costs of books and supplies, living expenses, and characteristics of the freshmen class.

*Cooperative Programs of Training and Research in Mental Retardation,* by Darrell A. Hindman. Yellow Springs, Ohio: The Antioch Press, 1959. 160 pp. Limited free distribution to libraries, students, and professional workers in the field of mental retardation, 25¢ for mailing.

Based on an 84 per cent return of a questionnaire sent to 124 public and private residential facilities for the mentally retarded in the United States and Canada, this study tries to determine the nature and scope of cooperative programs of training and research between institutions and universities. The questionnaire returns are analyzed and representative programs are described.

*Is College For Me?,* edited by the publishers. New York: Sterling Publishing Company, 1959. 176 pp. $2.95.

In this book for the high school student and his parents are discussed such questions as going to college, choice of college, getting into college, paying for college, special colleges and alternatives to college, what college is like, and military service. There is a 47-page checklist of low-cost, denominational, and junior colleges.

*Librarians Wanted: Careers in Library Service,* by Adrian A. Paradis. New York: David McKay Company, 1959. 276 pp. $3.50.

Career-minded teen-agers are the intended readers of this story of the library profession, its opportunities, rewards, and training required. In addition to an introductory description on library work and closing information on preparation for the library career there are chapters describing public, regional, school, college, government, business, technical, medical, association, and other libraries.

*The Dawning Space Age,* by H. E. Mehrens. Ellington Air Force Base, Texas: Civil Air Patrol, 1959. 224 pp. Paperbound $2.

A source of basic information for Civil Air Patrol cadets, this book on missiles and rockets should be of value in science courses or courses concerned with the derivative social, economic, and political implications of astronautics. It describes in secondary-school language propulsion and guidance systems, military missiles and research vehicles, and the problems of space flight.

*Psychology for Better Living,* by Lyle Tussing. New York: John Wiley & Sons, Inc., 1959. 496 pp. $5.95.

Written for lower-division college students and other young adults, this beginning psychology textbook includes chapters on such topics as learning, adjusting to life, growth and development, understanding yourself, mental illness, adjustment mechanisms, understanding the opposite sex, and social forces that mold us. One 35-page chapter discusses vocational selection.

*A Century of Higher Education,* by Mabel Newcomer. New York: Harper & Brothers, 1959. 266 pp. $5.

The principles formulated by women educators and the institutions which realized them are reviewed and related in this book to the current work in the field of women's education. Such topics as the course of study, the students, financing women's education, the college woman and the job, scholars and artists, and homemakers and civic workers are discussed.

*Guidance in the Elementary School,* by Robert H. Knapp. Boston: Allyn and Bacon, Inc., 1949. 394 pp. $5.

Here is a text for teachers in training and for teachers, administrators, and guidance personnel in the field of elementary education. Major units are: Techniques of Guiding and Counseling, Techniques of Grouping, Guiding Children, Techniques of Administration.

*The Motivation to Work,* by Frederick Herzberg, Bernard Mausher, and Barbara Bloch Snyderman. New York: John Wiley & Sons, Inc., 1959. 157 pp. $4.50.

Based on individual studies of management personnel and interviews with a sample of 200 engineers and accountants, this book presents a theory of job motivation, job satisfaction, and job attitude. It describes how to avoid harmful employee behavior and how to increase employee performance, effectiveness, and personal satisfaction.

*You: Today and Tomorrow,* Third Edition, by Martin R. Katz. Princeton, N. J.: Educational Testing Service, 1959. 102 pp. Paperbound. Students' Edition $1, Teachers' Guide, $1.

Here is a work-text for eighth and ninth grade students. It is designed for classroom use by teachers with little or no training in guidance as well as by professionally trained guidance workers. Major sections concern abilities, values, interests, occupations, education, and making choices. Evaluation of this text included tape-recorded interviews with 100 students, an objective test given to 4,000 students, and opinions from 150 classroom teachers who used the book. There is a 32-page *Teacher's Guide.*

*The New American Guide to Colleges,* by Gene R. Hawes. New York: Signet Key, 1959. 256 pp. Paperbound 75¢.

This college guide by the editor of the College Entrance Examination Board contains specific facts and figures on 2,233 colleges in the United States. It lists briefly the location, date of founding, degrees conferred, number of majors offered, honors and independent study programs, number of semesters, cost of tuition, scholarships, total enrollment and percentage of freshman drop-out for each college as well as ratio of teachers to students, sports and social activities, and when to apply for admission.

*The Choice of an Occupation,* by A. B. Crawford, S. H. Clement, and N. Harrower, Jr. (Editors). Part I, General Principles of Orientation, The Professional Areas, The Fields of Science. New Haven: Yale University Press, 1959. 272 pp. Paperbound $2.25, cloth $3.

This aid to students at Yale in selecting their careers includes descriptions on 13 professions or professional areas and nine fields of science, written mainly by members of the Yale faculty. Introductory chapters on occupations and people, college and later life, aids to analysis, interest, occupational activity, and selecting a type of work precede the 28 sections on professional and scientific fields.

*Guiding Today's Children,* by the Los Angeles County Superintendent of Schools Office. Los Angeles: California Test Bureau, 1959. 295 pp. $4.75.

Studying, understanding, and planning for children, including those with special needs, helping the school staff work together for children, and evaluating guidance services are the emphases of this book. It replaces the 1948 *Guidance Handbook for Elementary Schools.* Included in the 44-page appendix are examples of personnel and special study forms.

* * *

**You are becoming what you are to become.**

# Occupational Information: A BY-PRODUCT

*by* THOMAS M. WEISS

IT IS AXIOMATIC that in any course of study students learn many more things than are structured into a course.

For one thing they learn attitudes. Often these are ones that an instructor would prefer they did not learn but frequently the unexpected outcomes delight and surprise him. Students may, for example, learn that they want no more exposure to the content of a discipline. They may learn that the instructor is a bore, a tyrant, a genius, or a clown. They may develop interests that were previously dormant and decide to expand their horizons in this subject matter field. They may change their major or their minor. They may alter their previous beliefs about education in general, the nature of human nature, and a myriad of other things.

Any of these are by-products of the teaching-learning situation. Some, if not all, have educational and/or occupational implications. This paper is concerned with one such by-product.

In August, 1959, 22 students enrolled in the course *Educational Sociology* at Arizona State University. The class was composed of senior and graduate students. Goals for the course were stated: (1) To become acquainted with the methods used by sociologists in sociological research, (2) to study the findings of sociologists, (3) to develop an understanding of the class structure in American society, and (4) to become aware of the role of various social institutions and their influence on school practise.

Any number of methods could have been used to achieve the above goals. Typically, students read extensively about what sociologists have done in the past, the instruments used and, the conclusions reached. Sometimes, field trips, guest speakers, movies, and film strips supplement lectures, reading, and discussion.

There is no question that these are excellent methods for learning about the society in which we live. It may be that they are the best methods. It is certain that the men who conducted sociological studies on a large scale are far more sophisticated and informed than most instructors could hope to be who, in turn, are more sophisticated and informed than students.

On the other hand, the majority of classical studies were undertaken more than a quarter of a century ago. Some were concluded prior to or during the great depression and others before the second World War.

The new look at society in such books as *The Exurbanite, The Organization Man,* or *The Status Seekers* can, to a degree, modernize

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the older studies. A troubling question remains. Are the cities or towns discussed in such books representative of the community in which the student operates? Undoubtedly much of the general pattern is comparable but some instructors and students feel it may be the differences that will make a difference that can significantly alter educational practise.

Operating on the assumption that *differences are important* students involved in the class being discussed here, decided to study their own community first and then compare their findings with those of others. This meant that they would need to learn about sampling procedures, constructing questionnaires, interviewing techniques, and methods of analyzing data. After they had developed some skill in these areas, the community was divided into eight areas and a rotation schedule developed which would insure that each student would have an opportunity to interview persons in each of the areas.

The community studied was called "Collegetown—USA" and had an estimated population of 16,000. Assuming four persons to a household, there would be nearly 4,000 families in the area. Students interviewed 673 or one out of every six. Questions developed for the questionnaire sampled attitudes toward: school, teacher satisfaction, teacher pay, homework, dating, socialized medicine, religion, etc., as well as actual facts about net income, investment in home and furnishings, church affiliation, church attendance, preferred place of residence, educational attainment of parents, college choice, where they thought the very poor lived, where the very wealthy lived, and occupations of members of the family.

Students spent approximately 50 hours each conducting the interviews. The data were entered on master sheets from which analysis and generalizations were made. Students then began intensive study of the classical studies to see whether or not their conclusions agreed with authorities in the area and when they did not to suggest reasons for the differences.

The most significant outcomes of this course were: (1) 19 out of 22 students expressed the feeling that this procedure made classical studies "more meaningful." The reason given for this reaction was that in previous courses in sociology the words of authority were often looked upon as "words of authority" rather than as actualities, (2) 17 of the students made reference to the importance of this procedure in applying the psychological principles learned in Educational Psychology, and (3) 16 students emphasized the importance of the information acquired with respect to educational and occupational information.

The data showed that parents planned to send their children to college in the ratio of 19:1. Students were quick to recognize that this was probably unrealistic in terms of the distribution of intelligence and the increasing difficulty in college entrance requirements. One hundred and forty-five were housewives, which led students to the conclusion that courses in sex education and/or home and family living were not "frill" courses but some of the most functional a school could offer. Fifty-eight were teachers and 22 were college professors, which led students to conclude that more occupational literature related to teaching would be helpful and that expanded club activities similar to Future Teachers

Clubs were indicated. Other occupations were listed in smaller numbers but students suggested that this information was valuable in tailoring courses to the individual needs of students as well as helping them to better insure transfer of training. Other occupations and numbers of times mentioned were: labor 39, sales 36, small business 35, farming 30, office manager 20, and clerk or office worker 20.

The stated goals of Educational Sociology did not include developing an interest in educational and occupational information. The fact that 80 per cent of the class specifically indicated the importance of this aspect of the course suggests that sometimes the by-products of a particular course are as valuable and perhaps as significant as the achievement of the stated goals.

## Ohio University Guidance Publications

Three booklets prepared as the result of research carried on under a grant of National Defense Education Act funds through the Division of Guidance and Testing of the State Department of Education of Ohio are:

**Evaluating the School's Testing Program** by George E. Hill
**Identifying the School's Guidance Resources** by George E. Hill
**Suggested Techniques for Conducting Talented Student Follow-Up Studies** by Donald A. Green and Robert W. Schmeding

Interested school people may have a copy by contacting the Center for Educational Service, College of Education, Ohio University, Athens, Ohio.

## New World Trade Academy Monographs

Six new monographs from the World Trade Academy Press, 50 East 42nd Street, New York 17, N. Y., covers careers in Electronics, Public Relations, Translating and Interpreting, Scientific Fields, and careers for Majors in English and Majors in Mathematics.

The 12,000–14,000 word monographs cover description, historical ground, education needed, nature of the work, major occupational classifications, opportunities, advancement, location of employment, advantages, disadvantages, financing education, bibliography, and further sources of information.

In all there now are 62 titles in the series, most of them bearing publication dates of the last three years. Cost of the paper-bound monographs is $1.25 each.

# Room 12 at 2:30

*by* **JANE BERRY and MARY LICHLITER**

THE title suggests a not infrequent notation on the calendars of college guidance and placement personnel. Such a notation may well mean that you have been requested to talk with a group of seniors, potential majors, or members of a subject-centered club regarding opportunities for employment following graduation.

Typical questions at such meetings are: Can I get a job related to my major? What types of organizations have jobs for liberal arts majors? Is it possible to get a job in social work with only a B.A.? Should I major in English?

A survey study of first permanent jobs of the 1958 women liberal arts graduates in 78 colleges and universities, conducted by the Women's Section of NVGA, provides information that may be useful to the placement officer, guidance official, or dean concerned with the employment problems of women liberal arts graduates.

TABLE 1 summarizes findings with respect to the types of organizations employing women liberal arts graduates from the class of June, 1958.

The large number of liberal arts graduates securing employment in education reported that their positions were classroom teaching in either elementary or secondary schools.

### The Hard to Place

Representative first permanent jobs for women liberal arts majors in such subjects as psychology, sociology, history, and English are interesting and in many instances reveal relevance to the student's major.

Sociology majors reported the acceptance of jobs with the following representative titles:

Adjudicator
Assistant at Rockefeller Institute
Chartist-Statistician
Children's Counselor
Consumer Interviewer
Girl Scout Executive
Insurance Representative
Pension Proposal Writer
Placement Manager
Probation Trainee
Social Investigator
Social Worker
Statistical Analyst
Teen-Age Program Director

It should be mentioned that a considerable number of the respondents reported that they had jobs with the title of caseworker. In the past, sociology majors have been discouraged about prospects for such jobs without any graduate work. It may be that known shortages in this area are opening up additional possibilities for the first-degree graduate who aspires to a position as a caseworker.

JANE BERRY is Lecturer in Education, The University of Kansas City, Kansas City, Missouri; MARY LICHLITER is Director of Guidance and Placement, Lindenwood College, St. Charles, Missouri.

Psychology majors reported accepting positions with the following representative titles:

Assistant Buyer in Retail Store
Copy Coordinator
Director of Information and Public Relations
Electroencephalography Technician
Employment Security Trainee
Engineering Aide
Group Worker
Insurance Trainee
Personnel Assistant
Personnel Interviewer
Psychiatric Aide
Psychometrist
Retail Trainee
Secretary: IBM
Social Investigator
Statistical Department Clerk
Youth Director

Representative jobs reported by history majors were:

Administrative Secretary (Indonesian Supply Mission)
Assistant to City Planning Librarian
Correspondent: Newsweek
Editorial Proofreader
Librarian Trainee
Management Intern (Federal Government)
Map Librarian
Program Assistant (Institute of International Education)
Research Consultant
Research Librarian (Publishing House)
Secretary to Member of Congress
Staff Assistant (American Field Service)
Travel Consultant
United Nations Guide

Representative jobs reported by English majors were:

Assistant Coordinator: Advertising
Assistant in Mail Order House
Business Librarian
Clerk: Publishing House
Copy Girl
Copyholder
Cripto—Communications
Director of Religious Education
Escrow Officer
Feature Writer
First Reader: Publishing House
Librarian Trainee
Patent Analyst
Proofreader
Reporter
Research Analyst
Research Director
Researcher: Central Intelligence Agency
Searcher: (Acquisitions Dept. Library of Congress)
Traffic Manager

### In Perspective

A survey of 3,808 women liberal arts graduates of June, 1958, reveals the most frequent first permanent jobs were as teachers, secretaries, case and group workers, and research assistants. The information provided by placement officers indicated that approximately 74 per cent of the first permanent jobs were in some way related to the graduates' major field. Twelve per

TABLE 1
Types of Organizations Employing Women Liberal Arts Graduates, 1958

| | *Number* | *Percent* |
|---|---|---|
| TOTAL reported job placements | 3,808 | 100 |
| Education | 1,744 | 46 |
| Business and Industry | 1,020 | 27 |
| Social Agencies | 553 | 14 |
| Government | 337 | 9 |
| Miscellaneous | 154 | 4 |

cent of the graduates were reported to have taken jobs in clerical or secretarial work which are, of course, the entry for many occupations that do not demand professional training.

Representative titles of first jobs indicate employment possibilities for the liberal arts graduate with majors in psychology, sociology, history, and English. These examples of first jobs should be helpful in discussions with student groups and in job development efforts with employing organizations.

A complete tabulation of the survey findings is available from: Mary Lichliter, Director of Guidance and Placement, Lindenwood College, St. Charles, Missouri.

REFERENCE

1. "Problems in the Placement of Women Liberal Arts Graduates." *Proceedings of the American College Personnel Association.* Personnel-O-Gram, 1958, *12,* No. 4.

## Future Nurses Clubs Chartered

A national charter for Future Nurses Clubs, high school career clubs helping young people explore nursing and community health programs, is being offered this year by the National League for Nursing, 10 Columbus Circle, New York 19, N. Y.

To be eligible a club must be organized in a high school, have a minimum of eight members, be open to all who are interested, have an advisor or sponsor recognized by the school, devote a substantial part of its program to exploring careers in nursing, and submit reports to headquarters upon request. There is a $5 fee for initial charter with a $2 renewal fee.

## Tuberculosis Interviewing Guide

The Bureau of Employment Security of the U. S. Department of Labor is now releasing a revised edition of its interviewing guide on pulmonary tuberculosis.

It is one of the series entitled "Interviewing Guides for Specific Disabilities," an aid to persons engaged in counseling and job placement of workers having disabilities included in the series. The 1959 edition of the guide reflects the latest developments in the treatment and employment of persons who have contracted tuberculosis.

Copies of the 10-page guide may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. at 5¢ per copy.

# The Pseudo-Vocational Problem

*by* PAUL B. BACHRACH

THE COLLEGE COUNSELOR, if one can generalize from personal experiences, is seeing, with increasing frequency, a type of student who presents an interesting pseudo-vocational problem.

This article will attempt to describe a "typical" student of this kind so as to facilitate his identification early in his college career or perhaps even during his high school years where the onset of symptoms frequently occurs.

The student at the college level is of either sex, but more frequently male, reflecting perhaps the higher proportion of male college students. He applies for counseling at various stages of his college career. Although many students apply during their freshman year, upper classmen are also well represented in this group. The student's application for counseling frequently coincides with academic difficulties so that many of the applicants are either on academic probation, about to fail or be dropped from one or more courses.

### Presenting Symptoms Given

Presenting symptoms may be described as follows:

1. Disinterest in and uninvolvement with college work.
2. Absence of educational and/or vocational objectives.
3. Ineffective or marginal academic work.
4. A desire on the student's part to leave school, to try "work for a while" or to enlist in the Army. This withdrawal is generally explained by the student as a means of stabilizing himself so that college will assume greater meaning and importance.

The above presenting complaints are frequently followed by the student's request for a battery of vocational tests. He argues persuasively that if he only had a clear vocational goal, he could then apply himself more vigorously and effectively towards college work and the attainment of that objective. This point is deceptively logical and frequently tends to move the counselor to administer such a battery. The test emphasis is laid on interests and values since intellective factors have been assessed by means of high school average, scholastic aptitude scores, and college grades. It should be emphasized that in surprisingly few cases are intelligence or scholastic aptitude scores so low as to suggest that the problem is essentially intellective in nature.

### Tests are Unproductive

The administration of such tests as the *Kuder Preference Record—Vocational, Strong Vocational Interest Blank,* or *Allport-Vernon Studies of Values* yield disappointing results with respect to vocational implications. Typically the *Kuder* produces a plateau-like profile, the *Strong* scores are concentrated in the C+, B− area and the

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*Allport-Vernon* reveals a concentration of values in the average range. In short, the test scores reflect the flatness of the interview and the uninvolvement concerning which the student has complained in his initial session.

Attempts to involve the student more actively in an interpretation of the test scores, his reactions thereto (both thoughts and feelings) his reactions to the college and the world of work are equally unproductive. The session is punctuated with long silences, many "I don't know's," a feeling of considerable distance between counselor and student, and a good deal of student anxiety.

It is at this point that the psychologist senses rather strongly that he is not dealing with a vocational or educational problem. The results of the vocational tests have served the positive purpose of substantiating these feelings. An openness to the student's constricted verbalization generally suggests the following:

1. Despite the student's earnestness and concern with a situation he regards as serious, he remains distant and uninvolved in the counseling relationship.

2. Typically, there is an absence of affect in his verbalization. His speech is generally flat and monotonous.

3. One senses that the student is alienated from himself—it is as though he were talking about a third person. No real identity emerges as the student talks about himself. The psychologist gets no real picture of a live human being.

4. The student's social life is quite limited or almost totally impoverished. He has few, if any friends, and engages in solitary hobbies. Heterosexual activities are minimal or non-existent.

5. Family relationships are at best proper and correct but lack any degree of intimacy or warmth. Emotional distance among members of the family is typical.

6. Life in a broad sense is characterized by planlessness and goallessness. This is by no means limited to college and work but applies to the broader aspects of living.

7. Such feelings as are expressed tend to be those of loneliness, hopelessness, and despair. These are not infrequently disguised by a veneer of humor and jocularity. "Beatnik" qualities are frequently in evidence.

8. As was suggested earlier, withdrawal techniques are frequently resorted to. A desire to "try work," enlist in the Armed Forces, or to travel around are frequently verbalized attempts to withdraw from counseling are not uncommon.

### Extensive Therapy Needed

Counselors should be alert to recognize that the above syndrome suggests fairly involved psychological problems which require extensive counseling or therapy. To deal with such problems as though they were essentially vocational or educational in nature results in the counselor focusing on symptoms, thus permitting the fundamental psychological difficulties to become fortified and internalized. Since there is frequently some awareness on the student's part of the real nature of his difficulties, a vocational-educational approach engenders feelings in the student that his problem is not really understood, lending some rational basis to his withdrawal from counseling. The result is that the student tends to convince himself of the futility of seeking further psychological help or

may re-apply only at a later time when his distress has become more acute and disabling.

The importance for counselors to be alert to students presenting the syndrome outlined above is obvious. The identification of such students and their expeditious referral to appropriate psychological or psychiatric agencies remains an important aspect of their work.

# REALITY TESTING of Potential College Graduates

by HOWARD D. BLANK

IN THE PROCESS of counseling potential college graduates towards an employment objective it is important to test *their attitudes towards things as they are.*

Reality suggests the physical as opposed to consciousness. It refers to that which has actual existence and is not imaginary, fictitious, or an appearance merely. Stating it another way, reality is the totality of all conditions imposed by the external world upon an organism's activity—the totality of that which cannot be merely wished or thought away.

Testing reality may be thought of as tentative action to see whether something will work or as behavior aimed at testing or exploring the nature of the individual's social and physical environment. We cannot be unimpressed by Good's listing of 294 different kinds of tests in his latest *Dictionary of Education* [2].

In fourteen years as Veterans Administration Counselor-in-Charge (Counseling Psychologist) of the Veterans Administration Guidance Center of the University of Pittsburgh, the writer has been acutely conscious of the need for various devices to enable the counselee to see conditions as they are. The following four devices have been or are being used:

1. Self Rating Scale based on 15 desired job characteristics desired by American business and industry and reported by the Personal Testing Laboratory of Rensselaer Polytechnic Institute [4]. The format is this writers. The first eight items are:

| | *Low* | *Average* | *High* |
|---|---|---|---|
| 1. Scientific interest | _____ | _____ | _____ |
| 2. Engineering & science knowledge | _____ | _____ | _____ |
| 3. Mechanical, structural, or aesthetic interest | _____ | _____ | _____ |
| 4. Expression (express ideas clearly) | _____ | _____ | _____ |
| 5. Judgment (thoroughness) | _____ | _____ | _____ |
| 6. Ability to solve problems | _____ | _____ | _____ |
| 7. Creative ability (originate ideas) | _____ | _____ | _____ |
| 8. Physical energy (vigorous) | _____ | _____ | _____ |

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2. Self Rating Scale based on 27 characteristics rated (rank order) as most important for college graduates by 552 Business and Industry representatives [5]. The format is the writers. Ten of the items are listed:

| | *Low* | *Average* | *High* |
|---|---|---|---|
| 1. Integrity (honesty wholeness, uprightness) | | | |
| 2. Ability to think logically (systematically) | | | |
| 3. Enthusiasm, initiative, drive | | | |
| 4. Dependability (reliability, worthy of trust) | | | |
| 5. Ability to communicate, orally and in writing | | | |
| 6. Emotional stability | | | |
| 7. Ability to get along with others | | | |
| 8. Evidence of good judgement | | | |
| 9. Ability to make decisions | | | |
| 10. Interest in career as opposed to "job" or salary | | | |

3. The Inquiry. This test [3] (personality) was developed by Dr. Kotula when he was a counselor in this center. It consisted of eight items as follows:

1. Make up five questions you would ask a psychiatrist.
2. Make up five questions you would ask a person to find out whether he has a good personality.
3. Make up five questions you would like to ask about your own personality.
4. Make up five questions you would ask a person to find out how intelligent he is.
5. Make up five questions you would ask a person who told you: "You aren't the easiest person in the world to get along with."
6. Make up five questions you would ask a person who told you: "I wish I could figure you out."
7. Make up five questions you would ask a person who told you: "There are times when I'd like to kill myself."
8. Make up five questions you would like to ask about this test.

3 of these items involve personal adjustment (1–3–6)
2 of these items involve intellectual adjustment (2–4)
2 of these items involve emotional adjustment (5–7)
1 of these items involves problems of insecurity (8)

4. Cartoon Folders [1]. These can be easily prepared under such headings as:

Employment and Personnel Problems (9 cartoons)
Persistence (11 cartoons)
Social Problems (12 cartoons) etc.

These devices are most helpful in assisting the counsellee to see himself realistically in reference to his various adjustment problems. You may want to try them.

## REFERENCES


1. Blank, Howard D., "Selected Cartoons" —unpublished. Selected from current magazines.
2. Good, Carter V., Editor, *Dictionary of Education.* New York: McGraw-Hill Book Co., Inc., 1959.
3. Kotula, Leo, "The Inquiry" 1953. Work sample test privately published.
4. Rensselear Polytechnic Institute Bulletin 55 #5, *Guidance Manual for the Professions of Science, Engineering, and Architecture,* Troy, New York.
5. Western College Placement Association Research Committee, "What Industry and Business Look For in the College Graduate (Bachelor Level)," *Journal College Placement*, Robert S. Herrick, Editor, 35 E. Elizabeth Avenue, Bethlehem, Pa.

# Current Occupational Literature

by GUIDANCE INFORMATION REVIEW SERVICE

MEMBERS of the Guidance Information Review Service are: Wilma Bennett, Edgewood Freshman High School, California; Irene Feltman, Southern Connecticut State College; Kenneth B. Hoyt, State University of Iowa; Harold Munson, New York State Department of Education; Ward Leis, Pasadena City Schools; Willa Norris, Michigan State University; Doral N. West, Grand Forks, N. Dakota; Robert M. Wright, Northeast Missouri State Teachers College; Richard M. Rundquist (chairman), University of Kansas.

Subject headings have been adapted, with permission of the author, from *Occupations Filing Plan*, Wilma Bennett, 1958, Sterling Powers Publishing Co., 748 S. Paseo Street, Corina, California.

Each item listed has been classified and coded in accordance with the following system:

**Type of Publication**

A—Career fiction
B—Biography
C—Occupational monograph
D—Occupational brief
E—Occupational abstract
F—Occupational guide
H—Business and industrial descriptive literature
I—Occupational or industrial description
J—Recruitment literature
K—Poster or chart
L—Article or reprint
M—Community survey, economic report, job analysis
N—Other

**Recommendation**

1. Highly recommended (maximum adherence to NVGA Standards).
2. Recommended (general adherence to NVGA Standards).
3. Useful (while because limited in scope it does not meet NVGA Standards, contains authentic, objective, timely, and helpful information).

ACCOUNTING

*Employment Opportunities for Women in Professional Accounting.* Inke, Lillian V., #258, U. S. Government Printing Office, 1955, 40 pp. 20¢. C-1.

*Opportunities in Accounting.* Raymond G. Ankers, Vocational Guidance Manuals, 1958, 118 pp. $1.65. C-2.

AGRICULTURE

*Now He Owns a Farm.* Chronicle Guidance Publications, 1959, 2 pp. Subscription Service. L-3.

AIR CONDITIONING AND REFRIGERATING INDUSTRIES

*If I Were 21.* Chronicle Guidance Publications, 1959, 2 pp. Subscription Service. L-3.

AIR TRANSPORTATION—AIRPLANE HOSTESS

*Air Line Stewardess.* Guidance Center, Ontario College of Education, January, 1959, 4 pp. Subscription Service. D-1.

AIR TRANSPORTATION—PILOT

*Airplane Pilot.* Careers, 1959, 7 pp. 25¢. D-1.

*They Learn to Fly in High School.* Chronicle Guidance Publications, February, 1959, 6 pp. 15¢. L-2.

ARCHITECTURE

*Architect.* Careers, 1958, 1 p. Subscription Service. L-3.

*Architect.* Michigan Employment Security Commission, 1959, 15 pp. 25¢. C-1.

ART

*Careers in the Crafts.* Harold J. Brennan, Rochester Institute of Technology, 1958, 29 pp. Free. I-2.

*Commercial Artist.* Careers, 1958, 4 pp. Subscription Service. L-3.

AUTOMOBILE MANUFACTURING INDUSTRY

*Designing Women at Home in the Auto Industry.* Chronicle Guidance Publications, Inc., 1958, 3 pp. 15¢. L-2.

AUTOMOBILE INDUSTRY AND SERVICES

*Auto-Body Repairman.* Chronicle Guidance Publications, 1959. 65¢. K-3.

*Automobile-Body Repairman.* Chronicle Guidance Publications, 1959, 4 pp. 35¢. D-1.

*Auto Accessories and Parts and Retailing as a Career.* Institute for Research, 1959, 20 pp. $1.00. C-2.

BUSINESS

*Junior Executive.* Chronicle Guidance Publications, 1959, 4 pp. 35¢. D-1.

*Junior Executive.* Chronicle Guidance Publications, Inc., April, 1959, 1 p. 65¢. K-2.

*Purchasing Agent.* Chronicle Guidance Publications, 1959. 65¢. K-3.

*The Purchasing Agent.* Chronicle Guidance Publications, 1959, 4 pp. 35¢. D-1.

*Starting and Managing a Small Business.* Wendall O. Metcalf, Occupational Outlook Quarterly, February, 1959, 10 pp. Subscription Service. L-2.

CHEMICAL INDUSTRIES

*Careers in Industrial Chemistry.* Ralph I. Van Peursem, Rochester Institute of Technology, 1958, 26 pp. Free. I-2.

CHEMISTRY

*A Jane in a John's World.* Chronicle Guidance Publications, January, 1959, 2 pp. 15¢. L-3.

*Careers in Chemistry and Chemical Engineering.* American Chemical Society, 1955, 106 pp. $1.50. N-3.

*Frontiersman of the Future.* Manufacturing Chemists' Association, 1957, 16 pp. Free. F-3.

*Shall I Study Chemistry?* American Chemical Society, 1958, 16 pp. Free. N-2.

*The Chemical Profession.* L. C. Atchison, American Chemical Society, 1956, 40 pp. 25¢. I-2.

CHIROPRACTIC

*Chiropractor.* A. E. Homewood, D. C. Guidance Centre, 1959, 4 pp. No price. D-1.

*Chiropractic . . . A Career.* John J. Nugent, D. C. National Chiropractic Association, 16 pp. No price. C-2.

*Educational Standards For Chiropractic Schools.* John J. Nugent, D. C. National Chiropractic Association. Sept. 1955. 24 pp. No price. N-2.

*Educational Requirements for Licensure and Colleges Accredited by the National Council on Education.* John J. Nugent, D. C. National Chiropractic Association, Jan. 1959, 2 pp. No price. N-3.

CIVIL SERVICE

*Agricultural and Fishery Marketing Specialist.* U. S. Government Printing Office, 1958, 20 pp. Free. N-3.

*Career Profiles—U. S. Department of Interior.* U. S. Government Printing Office, 1959, 85 pp. 35¢. B-2.

*Federal Service Entrance Examination.* U. S. Government Printing Office, 1958, 12 pp. Free. H-3.

*Federal Service Entrance Exam.* U. S. Government Printing Office, 1958, 7 pp. Free. H-2.

*Opportunities in Civil Service.* Morton Yarmon, Vocational Guidance Manuals, 1957, 96 pp. $1.65. H-1.

CONSERVATION WORK

*Fishery and Wildlife Management, Biologist.* Fish and Wildlife Service, U. S. Department of Interior, 1957, 12 pp. Free. N-3.

*Employment Possibilities in the Fish and Wildlife Service.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 10 pp. Free. N-3.

*Preparation for Positions in Fishery Research.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 5 pp. Free. N-3.

*Refuge Aid.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 2 pp. Free. N-3.

*Refuge Manager.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 2 pp. Free. N-3.

*Standard Qualifications for Examination for Fishery Biologist.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 2 pp. Free. N-3.

*Standard Qualifications for Examinations for Fishery Aid.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 4 pp. Free. N-3.

*Standard Qualifications for Examinations for Fish Hatchery Manager.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 2 pp. Free. N-3.

*Standard Qualifications for Examinations for U. S. Game Management Agent and U. S. Game Management Pilot.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 4 pp. Free. N-3.

*Standard Qualifications for Examinations for Predator and Rodent Control Supervisor.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 4 pp. Free. N-3.

*Standard Qualifications for Examinations for Wildlife Biologist.* Fish and Wildlife Service, U. S. Department of Interior, 1959, 2 pp. Free. N-3.

CONSTRUCTION INDUSTRY

*Boilermaker.* Careers, 1959, 1 p. Subscription Service. E-2.

*Carpenter.* Chronicle Guidance Publications, 1959. 65¢. K-3.

*Carpenter.* Chronicle Guidance Publications, 1959, 4 pp. 35¢. D-1.

*Construction Machinery Operators.* Chronicle Guidance Publications, 1959, 65¢. K-3.

*Construction Machinery Operators.* Chronicle Guidance Publications, 4 pp. 35¢. D-1.

COSMETOLOGY

*Opportunities in Beauty Culture.* Florence E. Wall, Vocational Guidance Manuals, 1958, 108 pp. $1.65. I-1.

CRAFTSMEN (SKILLED)

*Can I Be a Craftsman?* General Motors Corporation, 1957, 20 pp. Free. N-2.

DANCING AND SKATING

*Opportunities in Dancing.* Paul Denis, Vocational Guidance Manuals, 1957, 72 pp. $1.65. C-2.

DIETETICS

*Dietitians in Demand.* The American Dietetic Association, 1956, 8 pp. Free. J-3.

DRAFTING

*Mechanical Draftsman.* Benjamin J. Stern, Research Publishing Company, Inc., 1957, 16 pp. $1.50. C-2.

ELECTRICIAN

*Electrician.* Gordon Richards, The Guidance Centre, University of Toronto, 1959, 4 pp. 10¢. D-2.

*Electrician.* John J. Duggan and Richard B. Hill, Research Publishing Company, Inc., 1957, 16 pp. $1.50. C-2.

*Maintenance Electrician.* Careers, 1958, 8 pp. 25¢. D-2.

ENGINEERING

*Do I Have Engineering Aptitude?* Dr. A. Pemberton Johnson, Engineers' Council for Professional Development, 1958, 8 pp. Free. N-3.

ENGINEER, AGRICULTURAL

*The Agricultural Engineer.* Ross A. Phillips, Chronicle Guidance Publications, 1959, 4 pp. 35¢. D-1.

ENGINEERING, CHEMICAL

*Chemical Engineer.* W. G. MacElhinney, The Guidance Centre, University of Toronto, 1959, 4 pp. 10¢. D-2.

*Engineering—A Creative Profession.* Engineers Council for Professional Development, 1956, 32 pp. 25¢. F-1.

*Engineering Education at Manhattan College.* Manhattan College, 1959, 42 pp. Free. N-3.

*What is an Engineer?* Ford R. Park, Careers, 1958, 4 pp. Subscription. L-3.

*Traffic Engineer.* Careers, 1959, 2 pp. Subscription. N-3.

ENGINEERING, CIVIL

*Engineering—A Creative Profession.* Engineers' Council for Professional Development, 1956, 32 pp. 25¢. G-1.

ENGINEERING TECHNICIANS

*Engineering Technologist.* The Guidance Centre, Ontario College of Education, 1959, 4 pp. 10¢. D-2.

FINANCE

*Bank Teller.* T. R. Lee, The Guidance Centre, University of Toronto, 1959, 4 pp. 10¢. D-2.

*Consider a Career in Banking.* Arthur Hug, Jr., Careers, 1959, 2 pp. Subscription Service. L-3.

*So You Want to Work in Finance.* Ford Career Guide Number One, 1959, 5 pp. Free. D-3.

FIRE DEPARTMENT WORK

*Fireman.* Careers, 1959, 2 pp. 25¢. N-3.

FISHING INDUSTRY

*Fishery Methods and Equipment Specialist.* Department of the Interior, 1957, Folder. Free. N-3.

HOME ECONOMICS

*What's Different About a College Education in Home Economics?* Theresa R. Humphreyville, Cornell University, 1958, 20 pp. Free. N-1.

HOTEL WORK

*Directory of Schools and Colleges Offering Courses for the Training of Managers, Supervisors, and Workers in the Hotel and Restaurant Industry.* The National Council on Hotel and Restaurant Education, 1959, 32 pp. 25¢. N-3.

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American Journal of Public Health, 1790 Broadway, New York, New York.
American Museum, Hayden Planetarium, New York 24, New York.
American Occupational Therapy Association, 250 W. 57th St., New York 19, New York.
American Optometric Association, 4030 Chouteau Ave., St. Louis 10, Missouri.
American Osteopathic Association, 212 E. Ohio St., Chicago 11, Illinois.
American Podiatry Association, 3301 16th St., N.W., Washington 10, D. C.
Careers, Largo, Florida.
Cornell University, Ithaca, New York.
Chronicle Guidance Publications, Inc., Moravia, New York.
Department of the Interior, Washington 25, D. C.
Engineers Council for Professional Development, 29 W. 39th St., New York 18, New York.
General Motors Corporation, Department of Public Relations, Detroit, Michigan.
Guidance Center, Ontario College of Education, University of Toronto, Toronto 5, Canada.
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Illinois College of Optometry, 3241 S. Michigan Ave., Chicago 16, Illinois.
Institute for Research, 537 S. Dearborn St., Chicago 5, Illinois.
Julian Messner, Inc., 8 W. 40th St., New York 18, New York.
Kiplinger Magazine, 1729 H. Street, N.W., Washington 6, D. C.
Manufacturing Chemists' Association, 1625 Eye St., N.W., Washington 6, D. C.
Metropolitan Life Insurance Company, 1 Madison Ave., New York 10, New York.
Michigan Employment Security Commission, 7310 Woodward Ave., Detroit 2, Michigan.
National Association of Chain Drug Stores, 34th St. and Park Ave., New York, New York.
National Association of Real Estate Boards, 36 S. Wabash Ave., Chicago 3, Illinois.
National Council on Hotel and Restaurant Education, Box 7727, Benjamin Franklin Station, Washington, D. C.
National Education Association, 1201 Sixteenth St., N. W., Washington, D. C.
National Recreation Association, 8 W. Eighth St., New York 11, New York.
North Dakota Agricultural College, Fargo, North Dakota.
Occu-Press, 489 Fifth Avenue, New York 17, New York.
Park Publishing House, 4141 W. Vliet St., Milwaukee 8, Wisconsin.
Research Publishing Company, Inc., Boston, Massachusetts.
Rochester Institute of Techology, 65 Plymouth Ave., South, Rochester 8, New York.

Society at Petroleum Engineers of ATME, 800 Fidelity Union Bldg., Dallas, Texas.
"Success Unlimited" Magazine, 5050 Broadway, Chicago 40, Illinois.
The Guidance Centre, 371 Bloor St., West, Toronto 5, Ontario, Canada.
United States Department of Interior, Fish and Wildlife Service, Washington 25, D. C.
United States Government Printing Office, Washington 25, D. C.
University of Houston, Cullen Blvd., Houston, Texas.
University of New Hampshire, Durham, New Hampshire.
Vocational Guidance Manuals, 1011 E. Tremont Ave., New York 60, New York.

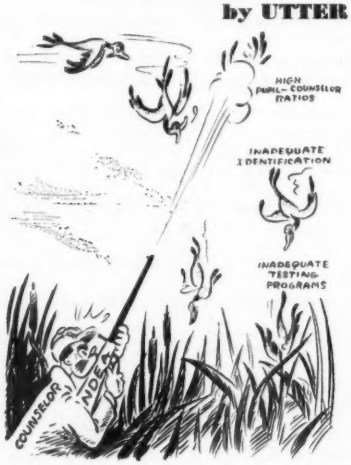
## *New Free Booklet on Epilepsy*

A new booklet on epilepsy has just been published by the Federal Association of Epilepsy, 1729 F Street, N. W., Washington 6, D. C. It is entitled "Epilepsy—Its Causes, Effects and Treatment."

It is designed to give the epileptic, his family, and friends an understanding of the condition and advice about treatment.

***Yearlong Open Season***

**by UTTER**



# Psychological and Guidance Services in the Public Schools

*by* HIRSCH L. SILVERMAN

INTELLIGENT FUNCTIONING by pupils on all levels is a paramount goal of school education.

Educators know that "IQ," for example, is only a number which designates relative general ability to learn. It does not necessarily describe special talents, but is a numerical estimate of an individual's rate of mental growth. Finding IQ's should not be the goal in testing in our public schools, but instead better understanding as to how pupils may work together in schools as good citizens in a community; how far they may be encouraged to think and create; and through what means teachers, using pupils' intelligence scores, can teach them self-discipline. In fine, our schools should be more and more concerned with the development of the whole child—intellectually, socially, morally, emotionally, and academically.

A systematic testing program in the schools makes possible significant educational procedures. The basic rationale of guidance and psychological services amounts to: facilitating better teaching on the basis of actual individual and class needs and capacities; analyzing the status of selected pupils, *i.e.*, the gifted, slow, and "problem" cases; obtaining objective, psychometric measures of the range of ability in particular classes; establishing records for promotions and transfer; determining a pupil's educational needs in terms of his individual potentialities; providing data for pupil evaluation individually and for parents' information in conferences and meetings; providing a cumulative record of growth in intelligence and achievement for the individual pupil and for the school system as a whole; and grouping students for purposes of instruction, not necessarily in homogeneity but for appropriateness and adequacy of teaching aids, motivation, implementations for learning, class activities, and readiness for academic work.

Through testing programs in schools, we can have additional data, both statistical and psychological, to predicate in part certain educational objectives. As established by sound psychological study, data concerning a pupil in and of itself is rather incomplete unless we put into practice effectively the facts we arrive at; and in time continually supplement our findings about each pupil with a determined view to help the student in learning ability, maturational development, educational progress, and fuller living.

Intelligent educational philosophy includes certain principles that form a *modus operandus:* We should recognize that the feeling

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of successful accomplishment is essential for children in developing wholesome attitudes toward themselves and toward others. Every pupil in the schools can have some degree of success academically if sufficient sensitivity as to the need of such success is present in the minds of teachers and school staff generally, and a sufficient variety of appropriate learning experiences is provided.

Parents of school pupils must arouse still more the interest of their children in learning and reading and thinking, the very basis of intelligent living; and maintain, through curiosity developed in experiences which are meaningful, a desire for and interest in educational progress. Overcritical, domineering, or overrepressive attitudes on the part of the parent may have harmful effects on the mental and physical health of boys and girls, whereas cooperative attitudes are developed through activities and real teaching that encourage them to participate with a sense of freedom and to share responsibilities for achieving a common goal. After all, group loyalty and morale are always increased by good intragroup cooperation, in the home as well as in society and in the school, psychologically, socially, emotionally, educationally.

Education in our day has fortunately changed from a merely standard grade curriculum to teaching as far as possible the individual child at his normal learning rate. Therefore, through guidance and psychological services we should strive to supplement the diagnostic basic tests with other psychometrics to meet specific needs throughout the individual pupil's entire academic training, in terms of interests, aptitudes, and personality psychodynamics. We should use test results *intelligently* for individual pupil counseling and for classroom grouping. Test results even in the elementary grades should be used on a sufficient basis for pupil counseling in preparation for entry in time to the Junior and Senior High Schools, to help establish together with teachers' judgments the selection in individual cases of an enriched curriculum of a functional academic program. An effective testing program certainly builds up descriptive material for pupils that has permanent value as a record of growth.

As regards psychological services and the guidance program generally, some viewpoints are additionally relevant and pertinent in terms of pupils' intelligence. In studying the development of any child, it is the view of the writer that it is necessary to look for the whole pattern of movement of the *energy-purpose-achievement* dynamic, not just an IQ notation. It is our feeling, again as a matter of educational philosophy, that it is our function in schools to arrange circumstances and situations which surround the learner in such a way that it is easy rather than hard for him to learn; for the organism known as the "pupil" must do his own growing and learning. (And this is not to imply making education "soft" or ineffectual for our children.) Finally, we must trust cooperation as the major technique of growth and development.

If all children in our public schools possessed equal mental abilities and comparable personalities, there naturally would be little or no need for testing. Indeed, the

teacher's job would be greatly simplified. But each child is an individual, fortunately for our democratic way of life, with wide range of differences in the capacity and achievement of each one in terms of others. Standardized and diagnostic tests, despite their imperfections and frequent misuse, have made healthy and significant contributions to meeting individual differences. In fact, such a testing program in our schools can aid in discovering and encouraging gifted children, as well as in helping to recognize and develop the strengths of the pupils who are below capacity in the ability to learn tasks required in school.

Parents, also, should come to know that a measure of achievement is indirectly a measure of intelligence, or capacity to learn. A pupil who does not achieve highly is usually one who has a relatively lower capacity; and, in general, there is a high degree of correspondence between achievement and intelligence. But this correlation is not perfect by any means, because achievement is also influenced by the effort which the pupil makes, the instruction which he has received over a period of years, and by other facts. Likewise, there is a positive correlation between a pupil's achievements and the degree of effectiveness which he has attained in the methods of learning which are required. A high degree of achievement cannot be expected from a pupil unless he is efficient as a learner. There is certainly a relation between the degree of effectiveness in doing certain types of learning and the pupil's intelligence.

Through the schools the pupil and his parents should be intelligently informed on test findings in general yet sensible terms. To every extent possible, the student and his parents should be taken into appropriate confidence with respect to the broader and intelligent interpretation of test scores. The detailed aspects of evaluation of pupil growth and adjustment records are to be kept, of course, completely in the confidence of the staff of the school.

All of the above, then, is prefatory to this basic fact: The primary purpose of educational and psychological measurement is to increase the effectiveness of the work of the schools. The use to which psychometric data is put by the individual teacher and parents who work intimately with the pupils daily indicates, in the final analysis, the effectiveness of any testing program. Scores on tests are effective when they are used intelligently and educationally (1) for evaluative predictions, (2) to give directionality to pupils in their school programs, (3) to make evident what a student has learned, and (4) to indicate whether a child has the skills or knowledge required for future success in an area or field of endeavor.

There are specific principles that parents, teachers, and administrators would do well to consider in analyzing scores on psychometrics: (a) test results supply only part of the vital data necessary to guide and instruct adequately; (b) the predictive value of tests is greatly increased when measures of the same or similar tests are administered periodically and results accumulated over a period of some years; (c) the testing program should help to stimulate progress in the continued development of an educational curriculum that will meet the needs of the youth that

the school system is serving; (d) test results should be understood as fully as possible and used by teachers, principals, and administrators, and should never be employed as a mere measure of an individual teacher's effectiveness but should be used to help the teacher become more effective.

Finally, this writer notes happily the exceptional cooperation and interest of administrative and teaching staffs among many school districts as regards the field of psychological services. Through administrative endeavors, professional encouragement, and seriousness of purpose, most of our present-day teachers and guidance personnel are proving themselves persons who arouse and maintain motivation in the school and classroom without establishing fear; who influence pupils without dominating them; who create a feeling of mutual confidence between themselves and their pupils; who understand and accept with insight the wide diversity of personalities among students; who bolster a pupil's self-confidence without making him unself-critical; and who have a high degree of personal integrity and interest in other people. Only in this way can teaching and guidance services function most effectively and constructively.

## Electronic Computing Occupations

NEW OFFICE JOBS—methods analyst, programmer, computer console operator, cardtape converter operator, and others—are being created by the use of electronic computers and related equipment. These jobs pay better and require higher levels of skill and training than many other clerical jobs, according to a bulletin—*Automation and Employment Opportunities for Officeworkers*—prepared by the U. S. Department of Labor's Bureau of Labor Statistics.

The first part of the bulletin contains a general discussion of the implications of the use of electronic data-processing equipment for clerical workers. The second part discusses in detail one of the new occupations—that of programmer—which has emerged with the development of automation.

Young people seeking a career in the field of office automation will want to know about the new occupation of programmer. There are four main steps in programming—analyzing the problem, preparing a flow diagram, writing detailed instructions, and making sure the program works on the computer. The programmer uses his knowledge of what the computer can do and his familiarity with the subject matter of a problem to plan the most efficient way of using the computer.

Companies have been filling most positions in this new occupation by selecting employees familiar with the subject matter to be programmed and giving them training in programming work. Since many of the office operations which are being taken over by electronic computer involve accounting work, employees with experience in accounting departments have often been selected for programmer training. However, new college graduate are sometimes hired as trainees, particularly for programming scientific work.

# Briefing ★ ★ ★ ★ ★ the JOURNALS

by CLARENCE W. FAILOR *and* EMORY J. WESLEY

RALPH C. O'NEIL, "Predicting College Success with the ITED," *California Journal of Educational Research,* 10 (March, 1959), pp. 86–89, 93.

Although college admission standards are higher, enrollments are increasing. In California, it was felt, that much of the information needed to help the student plan his educational and vocational future could be gained through the use of standardized test results.

Because the ITED is given to tenth graders in about ten per cent of all California high schools, a study was made to provide a check on the predictive powers of this test in terms of college success. The test was given in fifty-seven public and parochial high schools in 1951. In compiling the results, thirty-three of the original high schools and four institutions of higher learning, representative of California, contributed the data.

Various correlation coefficients were made among the ITED Composite Score, high school grade average, ACE Score taken in the freshman year in college, and the college averages in the freshman and sophomore years. The following results were obtained: (1) The ITED Composite Score and the high school grade average combined is a better predictor than either alone, (2) The Composite Score of the ITED was more consistent in its prediction than any single sub-test score, and (3) The use of the ITED in the tenth grade provides the counselor with useful information as to the advisability of a student seeking a higher education without waiting till the final high school grade average is obtained.

Although the total high school grade average is the best predictor of first year college and the freshman grade average predicts the sophomore year, using the ITED Composite Score and high school average in predicting the likelihood of success in college can be made with a greater degree of success than either one alone.—Audrey Payson

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JOHN K. COSTER, "Some Characteristics of High School Pupils From Three Income Groups," *Journal of Educational Psychology,* 50 (April, 1959), pp. 55–62.

In this study a large group of students selected from the population of nine Indiana high schools was divided into three income groups, and the pupils in the groups were compared on the number of items of personal information. Included were such things as sex, schooling of parents, and participation in school and community activities. High income pupils were more likely than middle and low income pupils to participate in high school and out of school activities, hold an office in an organization, get high marks in school, be named to the school honor roll, attend Sunday school and church regularly, successfully complete courses in school, and continue their education. A number of hours spent studying or working outside of school during the school year, however, did not differ among the

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groups. The number of items related to school and community experience which varied significantly with the income level contrasted markedly with the relative homogeneity of responses of the three groups to attitudinal items pertaining to school and school programs. There seemed to be an essential agreement between differences in responses to attitudinal items dealing with social acceptance and the extent of participation in school and community activities.

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JOHN W. FRENCH, "The Relationship of Home and School Experiences to Scores on Achievement Tests," *Journal of Educational Psychology*, 50 (April, 1959), pp. 75–82.

Complete home and background data along with the College Entrance Examination Board series of Tests of Developed Ability were available on a large group of students used in this study. Not only was there interest in an examination of the relationship between aptitude or achievement test and the prediction of academic grade, but also in knowing what background situations and experiences affect the test scores.

The results of this study indicate that science experiences were represented in the test series. In connection with the variable number of science courses taken, the preliminary screening studies suggest that the effect of a test score is present for physics and chemistry, but not for general science and biology. The humanities tests, as might be expected, have high relationship with writing and reading activities. However, their lack of relationship with music and art hobbies confirms what the nature of the test seems to indicate; namely, that scholarly appreciation and knowledge of music and art were being measured rather than talent or skill. The social studies tests are so highly verbal that they also measure writing and general reading activities rather than experience specific to social studies. The primary results of this study can be taken as a demonstration that useful information on what a test actually measures can be had by computing the multiple correlation with the experience variables and then cross validating, if possible. However, the only way to evaluate how well a test measures what it should measure requires use of weights that have been decided upon in advance.

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ROUL TUNLEY, "Should Your Child Be a Scientist?" *Woman's Day*, 23 (October, 1959), pp. 70–71, 89.

Here are wise cautions against hysterical, sputnik-inspired efforts to force uninterested and non-qualified youth into prescientific and scientific curricula. More and more are the services of professional "career doctors" necessary to the wisest utilization of manpower with these counselors working both in schools and in job clinics such as George F. Speer's Institute for Psychological Services in Chicago.

It is proposed that there are two best times for testing—"at the ages of sixteen and eighteen. At the earlier age, a youngster can choose the courses which will prepare him for the college or career he has decided upon. At the later age, he can make any changes which two additional years of study have brought about in his thinking." The Chicago clinic has found that fathers are far too adamant, more so than the mothers, in trying to force their choices upon children. This is a common problem which should be recognized and counter-balanced in so far as possible by professional counselors.

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MARTIN ESSEX, "How Good is Ability Grouping?" *National Parent-Teacher*, 54 (September, 1959), pp. 14–16.

It is warranted in any school with the size and staff to undertake it, says the superintendent of Akron, Ohio.

Devices to identify pupils' abilities will continue to be improved. Ability grouping will be as good as the particular school and community make it. It can be beneficial for the slow and average learner as well as the superior achiever.

Certain principles should be kept in mind in planning a program of ability grouping. It should, for example, be one which will permit association of each pupil with pupils of different abilities because as adults they will have a variety of experiences where this background will be essential to adequate understandings in a democratic society. Ability grouping has a better chance of success when parents are helped to understand individual differences. They need to understand that such grouping aims at the benefiting of all children, not a selected few.

The program to identify children's abilities should be continuous and comprehensive. Provision should be made for frequent conferences between teacher and parent, counselor and parent, and teacher and counselor. The pattern of grouping should be adjusted to the particular community. In several of these areas the P.T.A. can make even more valuable contributions than they have in the past.

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"Opinion Poll—Youth Conservation Corps," *Nation's Schools,* 64 (October, 1959), p. 62.

Do we need a youth conservation corps? Would it help to combat the problem of delinquency? A proportional sampling of school administrations in continental United States voted three to one in favor of such a corps patterned after the Civilian Conservation Corps of 1933–39. Only 3% of the sampling were opposed to the creation of a Y.C.C. as outlined in the Humphrey-Blatnik Bill which was introduced into the last session of Congress.

62% favored federal control, 14% opposed it, and 24% registered no judgment. 65% said they were against such a program on a state financed and controlled basis.

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VERA V. MILLER, "Education of the Gifted," *American School Board Journal,* 139 (September, 1959), pp. 23–26, 66.

This report of work with primary school children, mean I.Q. of 126, in Evanston, Illinois, indicates that there is no great advantage to any of the four plans being tested. The four plans are (1) acceleration, (2) segregation, (3) enrichment through partial segregation, and (4) enrichment within the class.

But, "academically speaking, as measured by the usual achievement tests, any effort to help these pupils use their potential wisely undoubtedly pays real dividends." It has been found that the superior child can do satisfactory work in the regular curriculum when spending one day in five "exploring enrichment activities." The superior children have learned typewriting, foreign languages, and how to conduct and report research. Bright underage children have achieved as well as bright at-age children in classes to which they have been accelerated.

Personality tests and ratings by teachers indicate good adjustments of the subjects of the study during these special emphases on their development. And teachers have been motivated to more than usual effort in the provision of suitable materials and methods.

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"Should You Go Into Business for Yourself?" *Changing Times,* 13 (October, 1959), pp. 7–10.

This is the first of a series. And it is potent with pertinent advice in an area where people typically enter with a dearth of appropriate occupational information. Major difficulties are listed; you give up your security, you take on a multitude of new worries,

you probably obligate yourself to work longer and harder than you are accustomed to.

Three major attractions are noted. Independence of "the boss." The idea that the sky is the limit on possible earnings. The pride and pleasure that comes from having created something.

A trio of categories of necessary information are introduced. Is the business considered that right one for you? What experience do you have and what are your real interests? Second, do you have enough money—for fixed regular expenses, for fixtures, supplies and equipment, for stock? Third, what are chances for success? Do you realize that half of new businesses last two years or less and that 80% fail within ten years? What is the market? What is the competition? Etc.

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KARL W. DEUTSCH, "What Do the New Computers Tell Us about the Way Our Children Grow?" *Child Study*, 36 (Summer, 1959), pp. 20–28.

From the molding skills of the early potter came the idea that human behavior can likewise be molded. In the seventeenth century originated, from the clockmaker's work, the terms "checks and balances" and "springs of action" soon to be used by our founding fathers in developing the government which was to control our actions. Later came the development of machines and the model used as the basis of mechanistic explanations of human behavior had its advent into psychological thinking. The model of organism was developed in the eighteenth and nineteenth centuries; an acorn grows into a tree, a kitten into a cat and so came another type of explanation of the way our children grow. But now it is realized by many that none of the old explanations are completely satisfactory. Modern gadgetry, from thermostat to guided missile to great computing machines, form the basis of this new effort at understanding, according to Professor Deutsch. He calls them communication models or cybernetic models and points out that they have been of assistance in our beginning to understand "how we would organize autonomy, how we would organize decision-making, and we are learning to make surmises about the nature of creativity and the nature of growth in relation to such creativity and freedom."

Deutsch sees at least a partial explanation to growth in the relation of memory to creativity. He analyzes the development of will as a restrictive force in learning on a broad horizon. And he ends with a proposal that teachers be educated before they go into the classroom largely in subject matter and then be required in, say five years, to study how the children learn as they work with the children.

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LEONARD S. BLACKMAN, "Research in Mental Retardation: a Point of View," *Exceptional Children*, 26 (September, 1959), pp. 12–14.

There has been an assumption that mental retardation is irremediable and irreversible that has handicapped research directed toward the help of the mentally retarded. This assumption should be challenged more than it has been. The study of retardation caused by brain injury is a beginning in this direction and should be followed by efforts to identify carefully as many other causes of retardation as possible. Instead of by definition declaring that the state of mental retardation is irreversible, the cause of progress would be served by simply declaring that as of "here and now" the condition exists and attempts should be made to find ways to remove that condition. No longer should special classes be for the purpose of removing the retarded child from the regular class so as to relieve average pupils and regular teachers from his "stupidity and misbehavior." The special class should be for the positive benefit of the handicapped child and

should be based on the belief that ways can be found to improve his condition and his chances of making a greater contribution to society.

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"School Guidance Programs: What & Why," *Changing Times*, 13 (September, 1959), pp. 30–32.

Here is an example of the articles pertaining to guidance that are appearing ever more frequently in non-professional periodicals. It makes the points that guidance programs are an aid to rather than a replacement for parents, that many schools do not have such programs and those that do are often inadequately staffed, that the services possible by such a program, well staffed, are beyond the time and capabilities of regular classroom teachers.

The misstatement is made that "Special counselors are not necessary in the early grades."

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ELISE ELKINS LESSING, "Mother-Daughter Similarity on the Kuder Vocational Interest Scales," *Educational and Psychological Measurement*, 19 (Autumn, 1959), pp. 395–400.

This study is similar to a study reported by Strong in 1943 comparing the similarity in interests of fathers and sons. For the purpose of the study the Kuder Preference Record-Vocational form CH was administered to 54 female college students and their mothers. The volunteer student subjects were recruited from a variety of colleges or universities in the midwest in such a way as to insure the final sample would contain an adequate range of social, economic, cultural, and religious backgrounds, to be found in the student population at large. A Pearson r was computed between the scores of the mothers and those of the daughters on each of the Kuder interest scales. The correlations ranged from 0.150 to 0.436, with an average correlation of 0.280. The average correlation is statistically significant as were the correlations for 6 of the 10 separate scales. As a control each daughter was paired with the mother of the girl next in the alphabetical listing of subjects. The correlations run on this basis on the ten separate scales and the average correlations failed to reach statistical significance. These findings were discussed pertaining to mother-daughter similarities as well as the Kuder Preference Record as a testing instrument.—E. James Quigley

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HENRY WEITZ and ROBERT M. COLVER, "The Relationship Between the Educational Goals and the Academic Performance of Women, A Confirmation," *Educational and Psychological Measurement*, 19 (Autumn 1959), pp. 373–380.

Two approaches, a vigorous study of the data and an adequate criteria of academic performance, were used in this investigation of determining whether or not a relationship existed between the choice of a major field and the academic effectiveness of women college students.

Eight hundred fifteen freshmen women students of Duke University were the subjects for this study. These students were divided into two groups, the undecided and the decided in terms of a major choice.

The criteria of academic performance used were: (1) grade point average at the end of the first semester, (2) percentage of each group being graduated, (3) number of semesters required to graduate, and (4) grade point average at graduation.

The findings of the criterion measures indicate that the decided group is favored over the undecided group. However, none of the differences are statistically significant. Therefore, there is no difference in academic performance between women students who report a major field of preference and those who are undecided.

The authors suggest that the above conclusion has some implication for guidance. Instead of assisting women students to clarify their major field choices, guidance workers should provide general kinds of education guidance.—Janet Ikeda

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ALAN HARRINGTON, "The Executive's Man: The Personnel Interview," *The Atlantic Monthly*, 204 (September, 1959), pp. 51–54.

Testing and measurement have progressed to such a degree that now many people put as much or more emphasis on the reliability of the tests as they do in their own judgement. This even goes to the extreme of individuals now trying to conform to the pattern which standardized tests have indicated is "what they are." There is even the possibility that a young man will not be advanced in his work, simply because the testing organization indicates that he is not the best qualified to accept the higher position. The danger here is that the tests simply are not all-inclusive enough to preclude that there are not talents that cannot be measured in this young man which may far outweigh any of the aptitudes and abilities that are measured. Face-to-face personal interviews and evaluations have become less important. The soul of the interview, instead of being personal intuition, has become the hypothetical personality description derived from tests and forms.—M. Lance Read

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JOHN J. CORSON, "Society's Stake—and Responsibility for Allocating Manpower," *Annals of the American Academy*, 325 (September, 1959), pp. 58–69.

There is a question of whether or not this nation has the institutions to properly aid those people seeking jobs. Each individual seeking employment needs (1) reliable information about the market for his skills, (2) the future of the industry in which he is to be employed, and (3) help in matching himself to the openings available. Presently seven institutions, both public and private, aid in employing individuals. A surprising number of employment decisions are based on sheer chance or poor information. The author recommends that the federal government provide central leadership, probably in the U. S. Department of Labor, for coordinating the seven institutions that already exist.—M. Lance Read

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HAROLD A. EDGERTON, "Two Tests for Early Identification of Scientific Ability," *Educational and Psychological Measurement*, 19 (Autumn, 1959), pp. 299–304.

The author discusses the possibility of identifying science potential at the sixth or seventh grade levels by means of two simple tests, "Science Background 1 A, Things Done," which is a check list of 258 activities related to science and, "Science Background 2 A, Vocabulary," which is a science vocabulary test of seventy-five multiple choice questions.

The author goes on the assumption that a science has its roots in one's earlier experiences. Thus, if students with potential in science can be identified early, it would be possible for teachers and counselors to help them.

Those boys and girls who fall in the upper third in the two tests should be given encouragement and opportunities to continue their activities in science.

Since these two tests are still inexperienced tests, they should be used with caution and after careful consideration and study by teachers and counselors.—Janet Ikeda

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"What's Going On In Schools and Colleges," *Changing Times, Kiplinger Magazine* (October, 1959), pp. 29–30.

It is pointed out by Changing Times that colleges are still recruiting the top

athlete, but that many schools are now recruiting top academic prospects also. Examples are given of eastern schools that have local clubs who do most of the recruiting.

Cited also in this article are the many pitfalls that hold back many potentially bright students. Inability to concentrate, poor use of time and lack of purpose are a few that are named.

Also included is a guide to help determine the approximate cost of college, and estimates of what it may cost five years from now.

Short paragraphs on "How to set up a Scholarship" and "Right Dress" are also included.

The article is designed to give you the latest in college and university trends.—Bob Raikes

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"School Guidance Programs: What and Why," *Changing Times, Kiplinger Magazine* (September, 1959), pp. 30–32.

In the past families have had to worry about what their children should do. Should junior plan on going to work upon graduation? Should he plan on college? If he attends college what will be the costs and requirements? Some expert advice would certainly be welcome; and nowadays more and more public schools are trying to supply it through their counseling services.

In the past most attention has gone to retarded and problem children. Now it's recognized that all youngsters have problems and that counseling benefits the average and the above average too.

Included in the article are several case studies of high schoolers and their problems. Expert guidance helps to solve them.

Interesting is the study of how students at mythical Thomas Jefferson receive information from the guidance program throughout high school which directs them to the proper job occupation or college.

A look at your schools is also given. Described is the ideal type of a counseling program.—Bob Raikes

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WALTER D. COCKING, "In Defense of American Youth," *The School Executive,* 79 (September, 1959), pp. 7.

This article is a refreshing editorial appraising today's youth who must mature "in a world of turmoil in which adults everywhere seem bent on violence and destruction." In stressing the difficulties of modern times the author supports the thesis "that never before has youth been so successful in bridging the gap between childhood and adulthood." We must respect the 90 per cent of today's youth who diligently use their advancement in education, achievement, and resourcefulness and whose morals, ethics, and values remain high. The other 10 per cent need the compassion and help of the adult populous in adjusting to this troubled age into which they were born. The characteristics of youth are listed with the implication that if the adults seek to understand them, then, perhaps, maturation of America's young people will progress to the extent that there will be no doubt of their capacity to live and improve an ever-changing and ever-complex society.—Beverly Barnett

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SPENCER BROWN. "Should They Go To College?" *The Ethical Outlook* (September-October, 1959), pp. 161–166.

The mechanic, the mason, the carpenter, the toolmaker, may be the son of a harvest hand or a porter but never the son of a doctor, lawyer, or insurance broker. The sons of the latter may not be in college but parents are determined that they will go and, by using various types of influence, usually succeed in sending them. Consequently the over-crowded colleges continue trying to educate ones who cannot learn at the expense of the more able.

Mr. Brown, a teacher counselor, feels that a change in social values and ambitions of the upper and middle class is necessary and can be brought

about by parents with courage and common sense who realize that their son might be a happy person and useful citizen as a radio mechanic without going to college. Mr. Brown also advocates radical reforms in college structure. He considers the four-year plan long for both the able and the unable, and too long for everyone because of the draft and the trend toward early marriages. He also would make junior colleges as intellectually respectable for boys as they are socially respectable for girls.—Robert Hefling

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AUDREY RIEGER, "Who Are the Gifted? What Are They Like?" *The Clearing House*, 34 (September, 1959), pp. 45–48.

Many people who work with children have attacked the problem of picking out the gifted from the average pupil. One of the first methods used was that of measuring intelligence by means of an I.Q. test. Sometimes the boundary between the bright and gifted is set at a level of 130. Lewis Terman, who did a significant study on 1000 gifted children, set his dividing line at 140.

Terman found the following to be true, in general, of the gifted group. They are avid learners interested in a wide range of subjects, and given the opportunity to do so, they could work independently and quickly. Vocabulary was superior to other children. As a group they did best in reading followed by arithmetic, language usage, science, and arts. They did less well in history, civics, and spelling—subjects which are more dependent on rote learning than on straight memory.

The gifted may face problems other than the usual problem of growing up. The emotional development and needs of these children are no different than those of other children. However, due to their superior intellect, problems in communication and social relationships often occur. The classroom teacher should welcome the opportunity to help the gifted child. The gifted must be freed from the conventional means of education, and the teacher's role in turn is not so much that of teaching, but that of helping the child attack and solve his problems.—Maynard C. Skinner

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D. K. WHEELER, "Punishment, Discipline and Educational Objectives" *The British Journal of Educational Psychology*, 29 (June, 1959), pp. 118–127.

It is becoming more and more apparent that the American schools are needing to establish a more rigid policy toward discipline in the schools. The recent and, it might be added, appalling, outbreak of crime by New York City youths has certainly brought this already prevalent problem even closer to the surface. There is much discussion regarding the action the schools should take. Many ask the question, "Are our youth any different from the youth of other countries?" How do adolescents feel toward punishment and discipline? Is corporal punishment the answer? The author tries to answer the latter two questions in a report of an investigation of adolescents made in western Australian secondary schools. The first question is left for your own analysis.

"The sample consisted of 290 first-year secondary school students (148 boys, 142 girls), 289 third-year (136 boys, 153 girls), and 186 fifth-year (113 boys, 73 girls) at school in 1951 (comprising 4 per cent, 10 per cent, and 24 per cent of the school population for each year). Mean ages for these three levels were 13 years 5 months, 15 years 4 months, and 17 years 2 months for boys, with girls a month younger in years 1 and 3."

Some of the questions asked the students were: A—Are punishments given in your school? B—What sort? C—Do you think it is right for this sort of punishment to be given in school?

The percentages were very high among both the girls and boys in favor of corporal punishment. The

general feeling was that as they became older the corporal punishment would be substituted by deprivation. The students were in agreement that punishment is good for them, or is good character training, or that it is an active deterrent from wrong behavior.

The author feels like most modern educators that remedial and preventive theories should surplant the vindictive, retributive or deterrent theories of punishment. "Diagnosis and cure are the desired processes in *remedial* discipline: in *preventive* discipline, the central idea is that, if right conditions exist, misbehavior is at a minimum." "The diagnostic approach to the learning situation (of which order and discipline are concomitants) must be the teacher's professional attitude."—Glynn H. Turquand

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JOHN W. FRENCH and ROBERT E. DEAR, "Effect of Coaching on an Aptitude Test," *Educational and Psychological Measurement* 19 (Autumn, 1959), pp. 319–330.

The conclusions based on the studies reported in this article indicated that a student preparing for the College Board Scholastic Aptitude Test (S.A.T.) need not spend money on special coaching. The reading of a few good books and some subject matter review would probably be equally as valuable. The article reviewed a series of studies by the College Board, including a group coaching students in private schools, a group coaching students in public schools, a study of coaching on items identical to those in the test, and a study of intensive individual coaching. Students who were coached for the S.A.T. were compared by analysis of covariance method with students who received no special assistance. Significant differences were found as a result of special training: however, these differences were less than the standard errors of the test. The article suggests that commercial coaching schools would provide less effective training than that provided in connection wiih these studies.—E. James Quigley

HAROLD F. COTTINGHAM, "Guidance and Instruction," *The Grade Teacher,* 77 (October, 1959), p. 50.

There is a growing trend in education to integrate the functions of guidance and instruction in the elementary school. The teacher has a double role, that of instruction and that of guidance, to meet needs coming from the pupil's own makeup, not from those recognized by society.

The time to offer guidance may come at any occasion when teachers may use such procedures as individual pupil conferences, group discussions, formal counseling sessions, or supervised play. With these techniques the teacher must display such attitudes so the pupil may feel he is accepted and has a sympathetic, understanding teacher.

The instructional role of the teacher should provide experiences so that he may gain knowledge, skills, facts, and attitudes given him by society. These goals are achieved through curriculum and instructional guides to correspond to grade level.

The teacher must complement these two areas by using methods which present knowledge and skills in terms of pupil's value structure. She must use subject matter directed toward greater self understanding.

There must be a merger of the instructional and guidance roles to give some unity. While the roles do overlap, the teacher's guidance function centers around decisions, goals, and plans, and the instructional responsibilities emphasize skills, facts, and cultural knowledge.—Priscilla Gaffney

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HAROLD W. WILLIAMS, "How to Find a Job after 40," *Coronet,* 46 (October, 1959), pp. 108–111.

It's twice as difficult to get a job after forty. At the height of the recession the Pennsylvania Bureau of Employment Security hired counselors to help the over-40 to find jobs. The conclusion was that older workers can be placed if they have confidence.

Employers are constantly reminded by business organizations and labor unions that age barriers are unwise. Laws forbidding discrimination are enforced in several states.

Public and private resources are ready to help these unemployed. A few simple job-finding rules follow.

1. Get professional help.
2. Concentrate on small firms.
3. Get someone to help canvass all potential employers.
4. Follow all leads.
5. Go back to school if necessary.
6. Try for jobs in a labor-shortage area.
7. Don't lie about your age.
9. Use the law.
10. Watch the waistline.

In the last analysis, if you get all the help you can, and have confidence in yourself, it is possible to gain a job after 40.—Priscilla Gaffney

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CARL H. WEAVER, "Sharpening the Measuring Instrument," *The Clearing House,* 1 (September, 1959), pp. 40–44.

This is an article giving data as to why some tests do not measure what they are suppose to measure.

Whether an individual prefers to use the teacher-constructed examinations, objective, or essay type test, or use a different test each time in evaluating their students is left up to the tester. Not even the best measurement experts in the business will predict how an item will behave when the test is administered.

However, three fairly easy procedures by means of which a teacher may determine whether any of his tests deserve the confidence he places in them are: (1) see that the test is constructed according to a carefully made plan; (2) make use of the plan whose items have adequate discriminating power which is likely to rank students in their proper order; (3) the plan should be composed of items whose difficulty indexes are spread rather evenly over a fairly wide range and should conform well to the test plan.

By using these three procedures, students should be ranked with respect to their knowledge of the subject matter studied in the way they deserved to be ranked.—Ann Marie Currie

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ROBERT P. FOX, "Recruiting for the Professions," *The School Review,* 67 (Autumn, 1959), pp. 344–349.

A gloomy picture of many professions is being painted for adolescents on the brink of selecting careers by parents, professional organizations, and textbooks. Some parents discourage their children from entering such low prestige professions as teaching or social work. Many professional organizations persistently bemoan and belabor such unpleasant facts as low salaries and incompetent recruits. Textbooks on careers do very little to convince young readers that various professions can be satisfying but instead dwell upon such grim facets as low pay and training periods which are long and growing longer. Little is said of job satisfaction or a sense of doing something worthwhile.

In order to rectify this situation, the author first organized a careers program which failed because of a lack of rapport and a gap in understanding between the various speakers and consultants and the young people. He then carefully planned a series of field trips in order for his pupils to observe people of various professions at work and in training. This proved much more successful and satisfying to all concerned. The pupils were genuinely interested and asked such pertinent questions as "Why did you choose your profession?" The answers opened new horizons on a man's work, what it can mean to him, and what it can mean to those his life touches.—Lawrence E. Longwell

# National Vocational Guidance Association, Inc.

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